CONTENTS

MY HOME – Burglar alarm

General features 174
General rules for installation 187
Configuration 203
Start-up and testing 216

Professional safety

The MY HOME burglar-alarm system is a safe and effective alarm system for the protection of people and their belongings, capable of detecting any intrusions, promptly notifying the event by means of sound and visual alarms, and by sending telephone messages. The system includes a central Unit that can be programmed for control and supervision of the system, management and control devices, volumetric sensors (IR technology or dual IR+MW technology), for the internal protection of the house, and perimeter sensors for the protection of doors and windows.
By integrating special devices, the system can also perform "safety" functions, such as remote assistance for old people, and the protection of the house from gas or water leaks.

As for all the MY HOME system, the wiring of the of the burglar-alarm system is based on BUS technology. All the devices are therefore connected using a non-polarised 2 wire cable. This features allows to share information with the other MY HOME BUS functions, and obtain advanced applications.

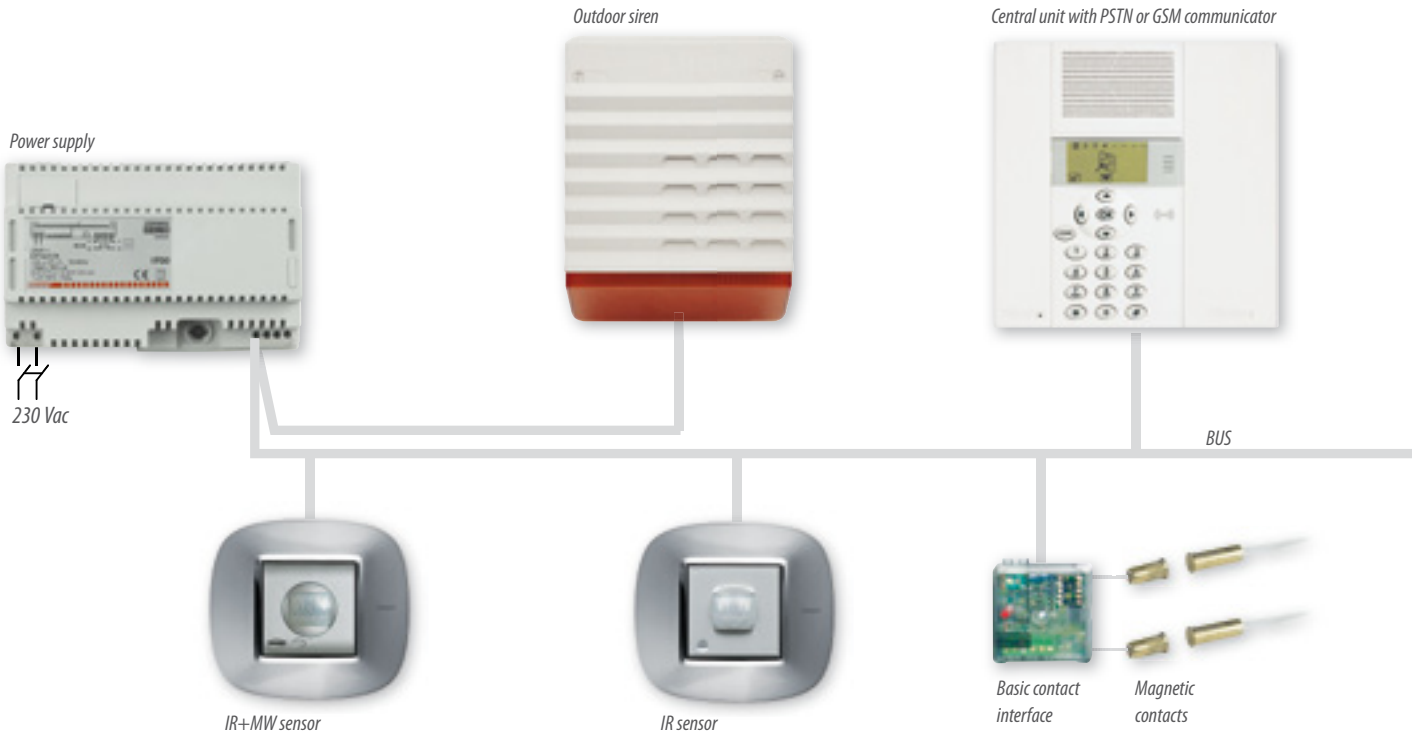
WIDE RANGE OF SOLUTIONS

- Central unit with integrated PSTN or GSM communicator, managing up to 72 sensors in 8 areas.
- Transponder connectors, radio wave connectors, infrared and Numeric code connectors.
- Wired or radio devices.
- Technical alarm management.
- Ademco Contact ID communication protocol management.

RADIO EXPANSION

By integrating the radio interface with the BUS system it is possible to expand the burglar-alarm system with radio detection and control devices. A range of optional functions also become available:

- Technical alarms - using a specific sensor, it is possible to perform flood control of the room.
- Remote assistance - to assure peace of mind and prompt assistance for people in difficulties.
- Radio control – it is also possible to integrate a radio remote control, for radio arming and disarming.



INTEGRATION WITH OTHER MY HOME SYSTEMS

Using a special interface, the burglar-alarm system can be easily integrated with other MY HOME systems, to obtain the following:

- Advanced applications resulting from the synergy among the individual systems (for example automatic switch-on of the lights following a burglar-alarm event);
- Local central management or remote central management via the Internet, using the MY HOME WEB portal of the system.

IMQ ALARM CERTIFICATION FOR LEVEL 2 DEVICES

The BTicino burglar-alarm system offers solutions for each protection requirement: from the minimum protection limit required in an apartment, to the most stringent levels offered by professional systems.

RADIO DEVICES

Remote control

Radio perimeter detector

Radio volumetric presence detector

BUS MY HOME SYSTEM

Automation

Video door entry system

Central management

Keypad connector with display

Radio receiver

SCS/SCS interface

BUS

To any other systems

Key ring badge transponder

Badge transponder

Transponder connector

Keypad connector

Advanced functions: the safety of the home and of people

The burglar-alarm system represents the basic infrastructure for alarm management, but the set of applications which can be implemented can easily be expanded. In fact the burglar-alarm system can be used to ensure the protection of people and their belonging from dangerous events such as gas leaks, flooding, etc. with alarm notifications (also remotely through telephone messages). Below are some examples:

WATER OR GAS LEAK ALARM

Water or gas leak detection with message forwarding and immediate shut-off of the water or gas piping.

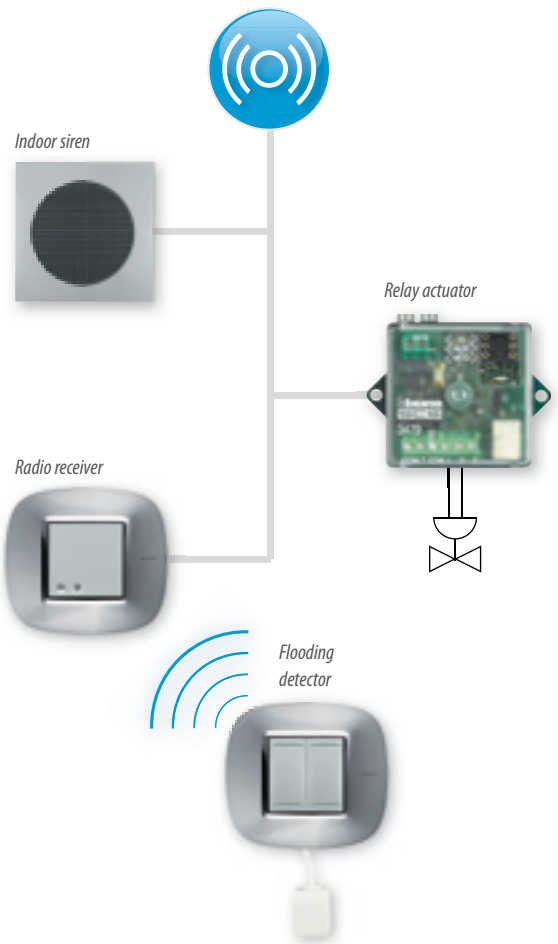
By integrating a water or gas sensor with the burglar-alarm system, in case of such a danger event occurring, the burglar-alarm system activates a solenoid valve that orders the shutting-off of the water or gas distribution network. At the same time an indoor siren will be activated, while a burglar-alarm central unit communicator will forward a telephone alarm message.

REMOTE ASSISTANCE

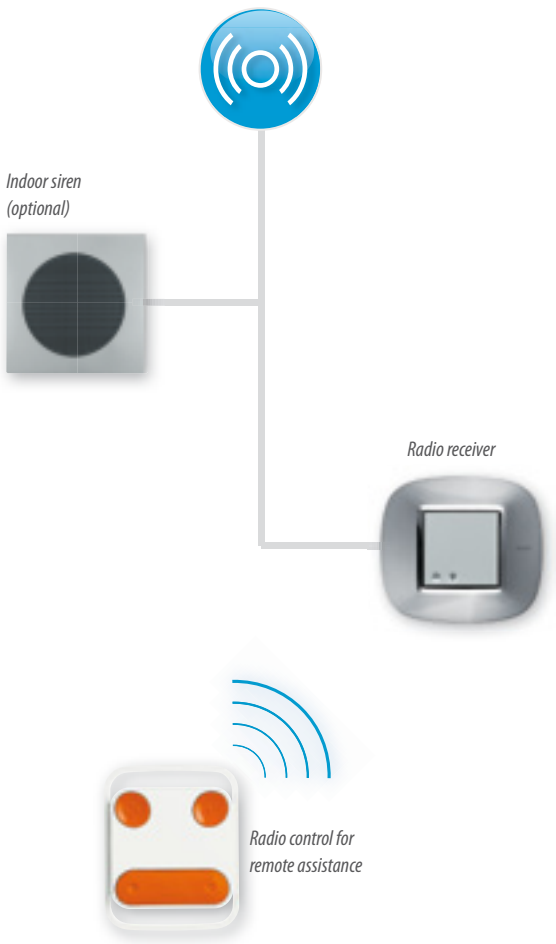
Forwarding of assistance request by calling personal numbers.

Old, disabled or recovering people may send an assistance request using a portable remote control. The signal transmitted is detected by a radio receiver connected to the burglar-alarm system, which activates an indoor siren, and the telephone communicator of the central unit, which forwards the assistance request to the set number(s).

WATER OR GAS LEAK ALARM



REMOTE ASSISTANCE



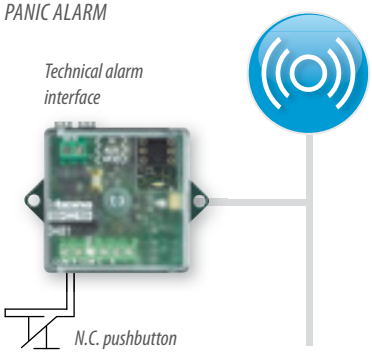
PANIC ALARM

In case of suspected noises inside the home, the owner can manually activate the burglar-alarm system to generate an alarm signal. If the system is armed all the sirens will activate to confuse any intruders. At the same time, the telephone communicator of the central unit will also send a remote assistance request. If the system is not armed only the indoor siren will activate (if present), while the communicator will forward the request for assistance.

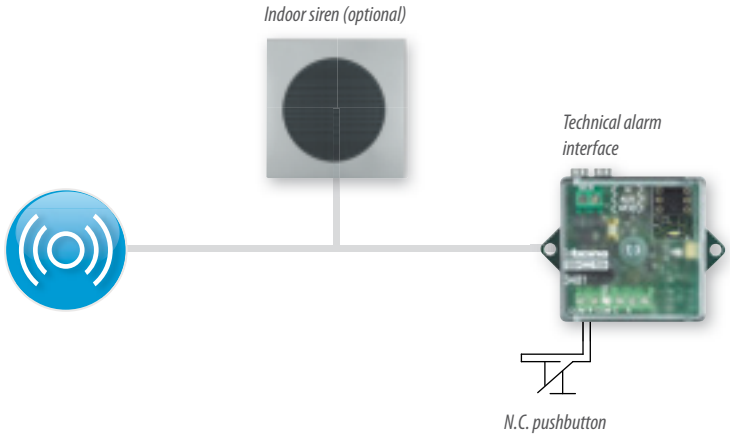
ANTI-BURGLARY ALARM

In case of danger, it is possible to activate the burglar-alarm system for sending a remote assistance request through the central unit communicator. The activation does not generate a sound alarm, thus allowing the police force to surprise the burglar, who is not aware that the call has been made.

PANIC ALARM



ANTI-BURGLARY ALARM



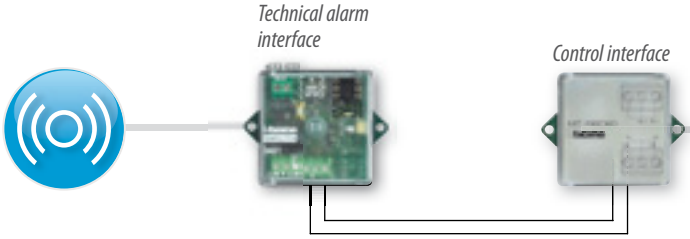
STOP & GO: TELEPHONE SIGNALLING OF TRIPPING OF THE GENERAL CIRCUIT BREAKER

By connecting SALVAVITA STOP&GO to the burglar-alarm system using a special interface, it is possible to receive a telephone message in case of tripping of the circuit breaker due to storm, electric disturbance, or system fault.

The SALVAVITA STOP&GO device automatically closes the tripped circuit breaker, reinstating the power supply in fully safe conditions. However, if the fault remains, due to an insulation defect or line overload, the burglar-alarm system will no longer try to reinstate the power supply, but will forward a message.

Stop & Go circuit breaker

STOP & GO

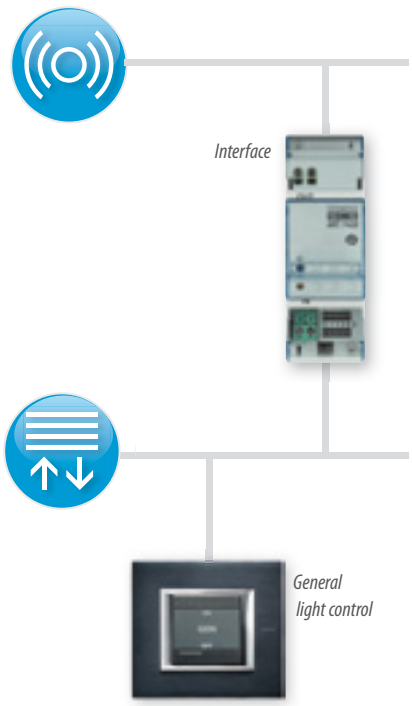


Advanced functions: integration with other MY HOME functions

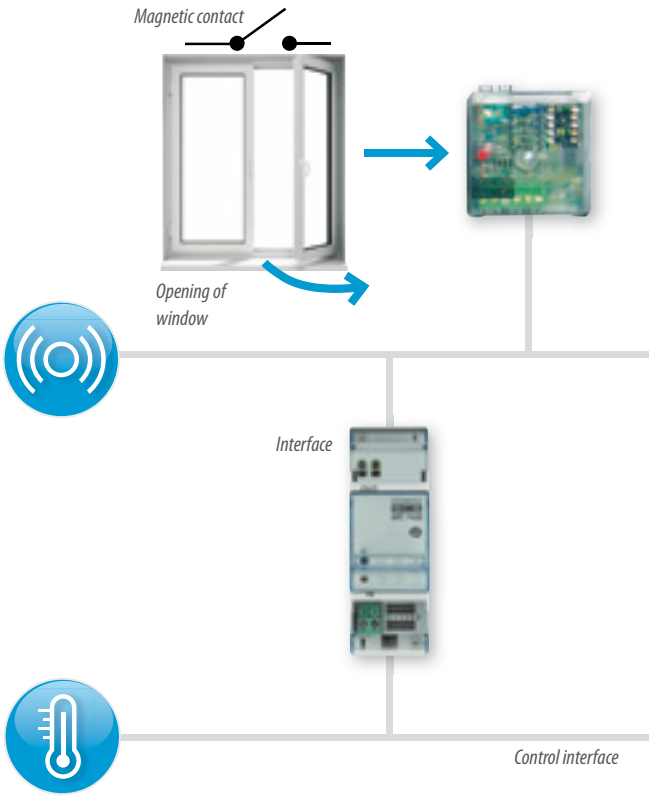
By sharing the same means of information transmission (BUS pair), the MY HOME applications can be easily integrated with each other to optimise functions and to generate new ones, thus meeting new requirements.
In this respect, the Burglar-alarm system can be easily integrated with the Automation or Video door entry system using a special interface F422. Of course by using several interfaces it will be possible to create fairly complex systems, through the integration of the burglar-alarm system with other systems with different functions (sound system, temperature control, etc.), which can therefore be managed also using a remote PC and the internet. Below are some examples:

- By integrating the burglar-alarm system to the Automation system it is possible to automatically switch on all the lights of the home following an intrusion event.
- Automatic disabling of the heating system.
  By integrating the burglar-alarm system with the heating system, it is possible to set a particularly useful function, which can bring in important energy savings, by avoiding unwanted dispersion of heat to the outside, for example when changing the air inside the house. In practice, when the doors or windows of a room are opened, the heating system of the temperature control zone of that room is automatically turned off. The opening and closing of doors and windows is detected by the burglar-alarm system contact interface, which reads the status of the NC contact installed on the door or window, and sends the information to the temperature control system for the appropriate actions.

COURTESY LIGHTS MANAGEMENT



AUTOMATIC DISABLING OF THE HEATING SYSTEM



System devices

The pages that follow show the main devices making up the MY HOME burglar alarm system. For the full list, refer to the "Catalogue" section.

BURGLAR-ALARM CENTRAL UNIT

Available in two versions:

- With telephone communicator, PSTN or PSTN/GSM;
- Without telephone communicator.

This is the device at the heart of the burglar-alarm system, capable of managing up to 72 sensors in 8 areas, and recognise up to 50 keys for the arming/disarming of the system. Using the large display, the user can control the system status, set advanced operating modes, such as user customisation, scenario management and activation of advanced functions resulting from the integration with other MY HOME systems.

It's also preset for the Ademco Contact ID function, for forwarding telephone messages to vigilance bodies following a burglar-alarm or technical alarm event.

- Customisation of users

The central unit can be programmed to allow access inside the house based on two criteria that can be customised by the user; by time band, and by type of area.

Time band: Access in protected areas is only allowed at certain times. For example, the maid is given a key that disables the burglar-alarm system each Tuesday between 9.00 o'clock and 12.00 o'clock.

Area: Access inside the house is only permitted in some areas. For example, the gardener is given a key that only gives him access to the tool room.

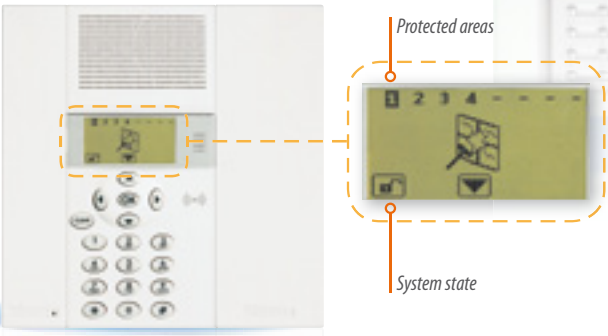
- Managing scenarios

It is possible to define up to 16 scenarios to activate, with one single operation, the burglar-alarm system for the areas of the home that need protecting.

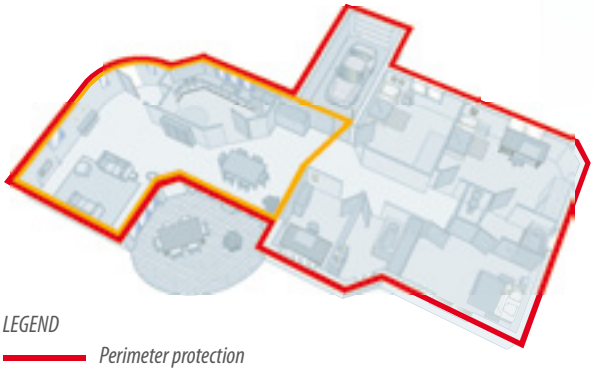
It is also possible to associate a certain scenario to each individual key

Base central unit

Central unit with PSTN or GSM telephone communicator



Night scenario: total protection of the day area and perimeter protection of the house.



Work scenario: complete protection of the house.

LEGEND

- *Perimeter protection*
- *Day area IR protection*
- *Night area IR protection*

Control and protection devices

ACTIVATORS

These devices can be used to arm/ disarm the system by entering a Numeric code or using a transponder key.

Using the keypad connector with display it is also possible to select the areas of the house that need protecting (separation), and to know the system status through the information shown on the display.

Keypad connector with display

Transponder key reader

Radio remote control with built-in transformer

CONTACT INTERFACES

For the connection to the burglar-alarm system of normally closed (NC) or normally open (NO) magnetic contacts for the protection of doors and windows.

DIN contact interface

BASIC contact interface

IR SENSOR

For the protection of the areas of the house.

Available in two versions:

- With IR sensor
- With IR sensor and MW (microwave) sensor.

For the protection of doors and windows, IR barriers are also available, in lengths between 0.5 and 2 metres.

IR barriers

IR+MW sensor

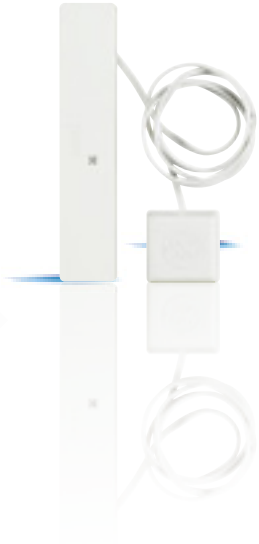
Note: For the full list of all the available devices refer to the "Catalogue" section.

Devices for radio expansion and technical alarms

IR SENSOR AND RADIO MAGNETIC CONTACT

Battery powered, these devices can be used to protect rooms where no BUS wiring is present.

Window-breaking radio detectors



Radio IR sensor

WIRE-RADIO INTERFACE

It allows integration with the wired burglar-alarm system of radio technology devices, such as the radio remote control in the previous page, and the devices listed below.

Wire-radio interface

DEVICES FOR TECHNICAL ALARMS

This family includes devices such as:

- The radio control, to send an assistance request;
- The radio sensor, to detect the presence of water;
- The Auxiliary channel interface, for integrating gas and water sensors with the burglar-alarm system;
- The Basic module contact interface.

Radio control for Remote assistance

Radio water sensor

System selection criteria

Today the wire burglar-alarm system can satisfy any installation needs in the home. The criteria should thus be indicated for a correct choice of the components, depending on the type of structure to be made safe and the functions required.
Four factors are to be considered when choosing a system.

- Area to be protected
- Alarm modes
- Protections
- System control

AREA TO BE PROTECTED

AVAILABLE FUNCTIONS	BASE CENTRAL UNIT			CENTRAL UNIT WITH PSTN COMMUNICATOR	CENTRAL UNIT WITH PSTN/GSM COMMUNICATOR
	L/N/NT4600/4	Polyx Alarm 3485B	HC/HD/HS4601 L/N/NT4601	Polyx Alarm 3485	3486
Maximum number of sensors	36	36	36	72	72
Maximum division into zones (areas)	4	4	4	8	8

SYSTEM CONTROL

WITH RADIO REMOTE CONTROL	WITH IR REMOTE CONTROL (ONLY WITH CENTRAL UNIT L/N/NT4600/4 AND 3486)	WITH TRANSPONDER	WITH NUMERIC CODE
HC/HD/HS/L/N/NT4618 Radio receiver	HC/HD/HS4604, L/N/NT4604 Activator	HC/HD/HS4607, L/N/NT4607, AM5787 Transponder reader	HC/HD/HS4606, L/N/NT4606, AM5786 Keypad connector
348220 Radio remote control	HC/HD/HS4603/4 L/N/NT4603/4 IR divider	HC/HD/HS4607/4 L/N/NT4607/4 AM5787/4 Divider transponder	
	4050 Remote control	3530S, 3540 Badge, key-ring	
		HC/HD/HS4608 L/N/NT4608 Keypad connector with display	

PROTECTIONS

AREA CONTROL

Fixed sensitivity

Swivel IR
(distance 6 m)
L/N/NT4611B
AM5791B

Wall mounting IR
(distance 6 m)
N4640B

Dual-technology (distance 10 m)
HC/HD/HS4613
L/N/NT4613

Variable sensitivity

Fixed IR (distance 3 – 9m)
HC/HD/HS4610
L/N/NT4610
AM5790

Wall mounting IR
(distance 3 – 9 m)
N4640

Wall mounting IR (distance 4 – 12 m)
3440

Swivel IR (distance 3 – 9 m)
HC/HD/HS4611
L/N/NT4611
AM5791

PERIMETER CONTROL

Sensors + Barriers

3510 FLUSH mounted magnetic detector

3511 Visibly
magnetic detector

3513 Magnetic detector for metal main doors

3512 Magnetic detector for swing doors

3510M Brass FLUSH mounted magnetic detector

Brass FLUSH mounted magnetic detector 3510PB

Sensors + Barriers

3516 Window breaking detectors

3444 Window-breaking radio detectors

3518, 3518/50, 3518/150, 3519
IR barriers for windows

Detectors

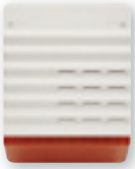
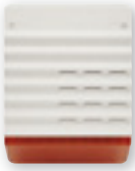
3514 Cable detector for shutters

3445 Cable radio detector for rolling shutters

3442 Radio opening detector

System selection criteria

ALARM MODES

	OPTION1 – Back-up battery in the outdoor siren			Option2 - Back-up battery in the switchboard		
	POWER SUPPLY	OUTDOOR SIREN	INDOOR SIREN	POWER SUPPLY	OUTDOOR SIREN	INDOOR SIREN
	E46ADCN	 4072L	HC/HD/HS/ N/NT4070	E47ADCN	 4072A	HC/HD/HS/ N/NT4070
Only outdoor siren	●	●		●	●	
Outdoor and Indoor siren	●	●	●	●	●	●
Only indoor siren				●		●
No siren				●	Central unit with communicator 3486	Polyx Alarm 3485

Warning: if both internal and external sirens are installed, tampering with the system when disarmed will only cause the indoor siren to go off.

ACTIVATION OF THE ALARM DEVICES DEPENDING ON THE STATUS OF THE SYSTEM AND THE DANGER EVENT

SYSTEM ARMED

Alarm event	Indoor siren	Outdoor siren 4072A (without internal back-up battery)	Outdoor siren 4072L (with internal back-up battery)	Relay actuator 3479 and F481 (1)	Telephone communicator of the 3485 and 3486 central units	Internal relay of the 3485B and L/N/NT4601 central units (2)
Burglar	Rings	Rings	Rings	Activates	Calls	Activates
Tamper	Rings	Rings	Rings	Activates	Calls	Activates
Tamptest	Rings	Rings	Rings	Activates	Calls	Activates
Anti-panic	Rings	Rings	Rings	Activates	Calls	Activates
Silence (burglar alarm)	Does not ring	Does not ring	Does not ring	Does not activate	Calls	Does not activate

Note (1): configure the device in MOD=0 (siren status repetition) to enable the operation described in the table.

Note (2): The relay contacts can be used to connect a third party optical/luminous alarm diffuser, or a telephone communicator.

SYSTEM DISARMED

Alarm event	Indoor siren	Outdoor siren 4072A (without internal back-up battery)	Outdoor siren 4072L (with internal back-up battery)	Relay actuator 3479 and F481 (1)	Telephone communicator of the 3485 and 3486 central units	Internal relay of the 3485B and L/N/NT4601 central units (2)
Tamper	Rings	Does not ring	Does not ring	Activates	Forwarding of event notification message	Activates
Tamptest	Does not ring Notification ⚠ in central units with display, or LED notification in central unit L/N/NT4601	Does not ring Notification ⚠ in central units with display, or LED notification in central unit L/N/NT4601	Does not ring Notification ⚠ in central units with display, or LED notification in central unit L/N/NT4601	Does not activate	Forwarding of event notification message	Does not activate
Tampering (disconnection of the central unit from the system)	Rings	Does not ring	Does not ring	Activates	Forwarding of event notification message	Activates
Tampering (disconnection of the siren from the system)	Rings	Rings	Does not ring	Does not activate	Forwarding of event notification message	Does not activate
Anti-panic	Rings	Does not ring	Does not ring	Activates	Forwarding of assistance request message	Activates
Silence (burglar alarm)	Does not ring It rings if the L/N/NT4600/4 central unit is installed	Does not ring It rings if the L/N/NT4600/4 central unit is installed	Does not ring It rings if the L/N/NT4600/4 central unit is installed	Does not activate	Forwarding of assistance request message	Does not activate

Note (1): configure the device in MOD=0 (siren status repetition) to enable the operation described in the table.

Note (2): The relay contacts can be used to connect a third party optical/luminous alarm diffuser, or a telephone communicator.

System selection criteria

CENTRAL UNIT FUNCTION

In addition to the criteria explained in the previous pages, the selection of the central unit can be made taking into account the possible available functions, such as:

- **KEYS ONLY OPERATING DURING CERTAIN TIME BANDS.** Enabling for the cleaning staff. In order to be able to do her job, the maid has been given a key for the disarming of the burglar-alarm system across the whole house, but only between 9.00 o'clock and 12.00 o'clock, on normal working days. During all other times and holidays the key does not operate.
- **AUTOMATION WITH CENTRAL UNIT 3486 OR 3485. Switching on of all home lights.** If the burglar-alarm system is integrated with the automation system, it can be set in such a way that if burglar-alarm event occurs, some or all the lights of the house will come on, inducing the burglar to leave.
- **KEYS ONLY OPERATING IN CERTAIN AREAS. Enabling access for the gardener.** The cellar is used to store gardening tools and is made accessible by the owner of the house every Tuesday from 2.00 to 6.00 pm. In order to do his job, the gardener has been entrusted with a key, which during the above times deactivates the burglar-alarm system of the cellar. All other areas of the house are still protected by the burglar-alarm system, armed by the owner when leaving the home for work.
- **AUTOMATION WITH CENTRAL UNIT 3485B. Activation of division scenario.** Each time the key is used (transponder, radio remote control or numeric key) to activate the system, a specific division scenario will be activated.

CENTRAL UNIT FUNCTION				
AVAILABLE FUNCTIONS	**4 ZONE**	**FLUSH-MOUNTED CENTRAL UNIT**	**CENTRAL UNIT WITH PSTN COMMUNICATOR**	**CENTRAL UNIT WITH PSTN/ GSM COMMUNICATOR**
	L/N/NT4600/4	Polyx Alarm 3485B HC/HD/HS4601 L/N/NT4601	Polyx Alarm 3485	3486
Max. no. of keys that can be saved (1)	30	20	50	50
Key constraints (day/ zone/time) (2)	NO	NO	SI	SI
Max. no. of scenarios	NO	4	16	16
Max. no. of automations	NO	10 (see note 4)	20 (see note 3)	20 (see note 3)
PC programming with software	NO	TiSecurity Basic for firmware update	TiSecurity POLYX for the programming of parameters and firmware update	TiSecurity GSM for the programming of parameters and firmware update

NOTE: (1) Keys are any control devices such as IR remote control, radio remote control, transponder key, and numeric key. (2) Each key can be set to only operate certain days of the week, in certain areas, or during certain time bands. (3) If the system is integrated with other MY HOME systems, for example lights automation, it is possible to switch all the lights of the house on, if a burglar-alarm system event occurs. (4) Of the 10 possible automations, one is activated using an auxiliary relay inside the central unit. The other 9 are combined to Arming, disarming, Date and Time events.

Project approach

The project of setting up a new MY HOME BURGLAR-ALARM system can be completed in two ways:

- Functional – this is a good compromise between cost and safety. The main priority is selecting which functions to include, and the possibility of making the system ready for future expansion is also taken into account. This solution includes, for example, both volumetric and perimeter protection. **Advantages: high level of flexibility and increase in the value of the property.**
- Economical – based on an economic, low cost installation It does not exclude the use of the different features offered by the system, although it only calls for the use of one type of protection (volumetric), and does not take into account future system expansions. **Advantages: low cost installation.**

In order to ensure a good work setup, the following elements are needed:

- Planimetry (**absolutely necessary**), of the living unit, so that the locations where the system elements are to be installed can be defined beforehand. It would also be appropriate to have a furniture plan.
- Definition of the protections, necessary to define which system devices to include (volumetric, perimeter or combined protection), and check that the protecting devices actually cover the appropriate areas.

ESSENTIAL ELEMENTS

Once the above information is available, the following must be agreed:

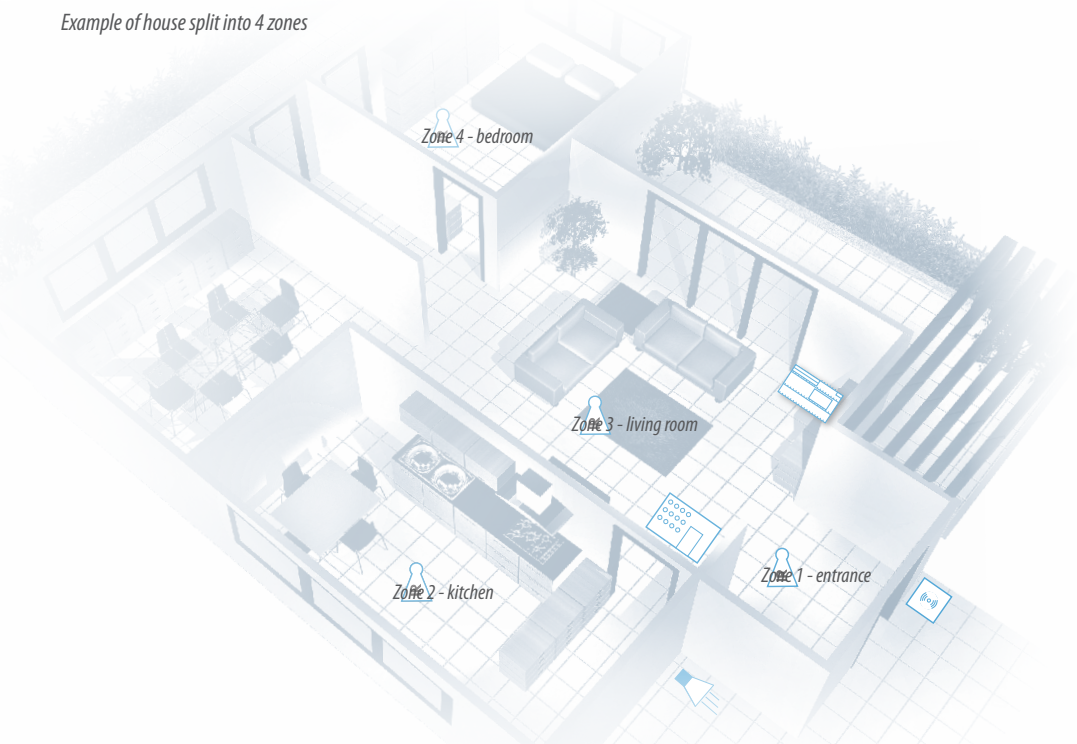
Selection of the protection:

- Volumetric protection is normally the basic protection. This decision must be made taking into account various aspects, with the main one being the actual location of the property. For properties on the ground or 1st floor, perimeter protection and/or protection of the rolling shutters, is recommended. Perimeter protection is also recommended if "external" access points near balconies are also present (e.g. rain water pipes, gutters, nearby balconies or terraces). With perimeter protection, the system can also be armed when people or animals are inside the property.

Division into zones

- For a better management of the sensors needed to protect the property, it is recommended that the system is divided in at least 2 ZONES: a perimeter and a volumetric zone (up to 9 sensors per zone)
- In properties with more than 2 rooms, the system should be divided into at least 4 ZONES:
  2 Perimeter ZONES (day/night areas) 2 Volumetric ZONES (day/night areas)
- In properties with several rooms, or in villas, the system should be divided into 4 ZONES or more.
- If the system does not include an external burglar-alarm arming / disarming device, a time delay should fitted on the sensors protecting the main entry. Otherwise, the "entrance" area should be kept as part ZONE 1, on which a time delay can be set as standard.

Example of house split into 4 zones



System measurement

MAXIMUM REACHABLE DISTANCES

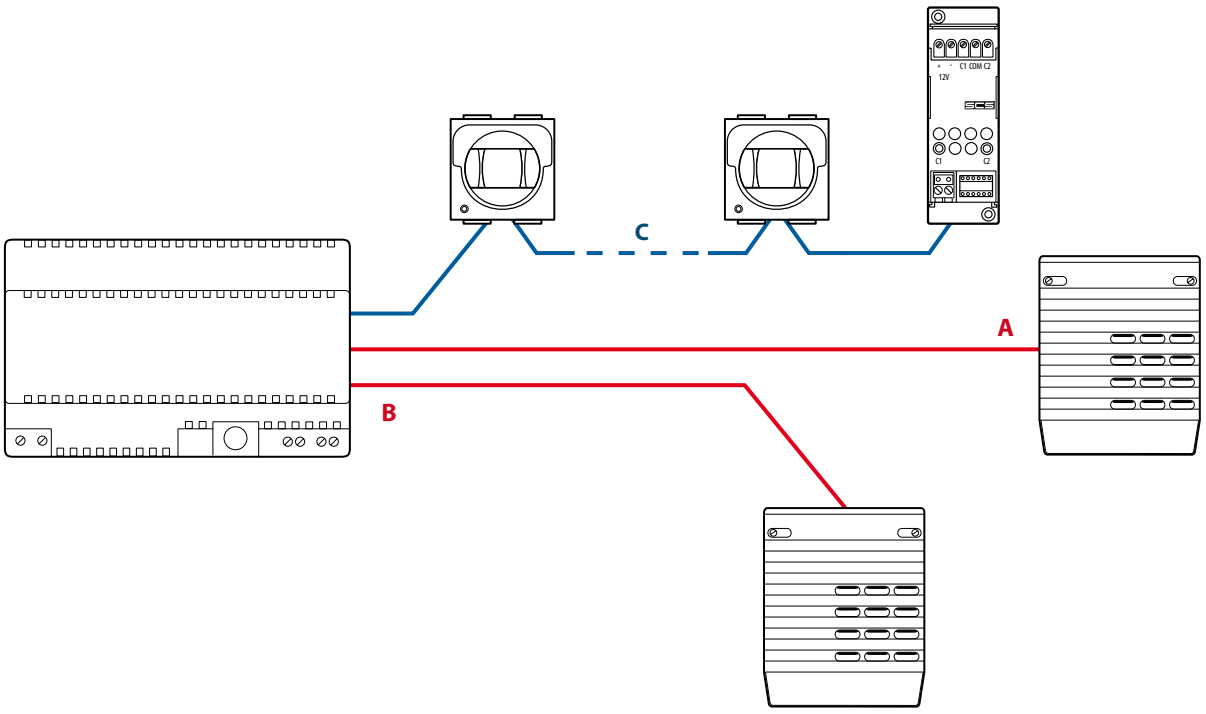
The maximum number of devices that can be connected to the BUS depends on the total absorption of the same and the distance between the point of connection and the power supply.
The power supply can supply up to 1.2 A (E46ADCN) or 1 A (E47ADCN); the maximum number of devices will therefore be determined by the sum of the absorptions of the individual devices to be installed.
In calculating the absorptions it will also be necessary to consider the availability of current based on the length of the cable.
During sizing ensure that the following rules are complied with:

- When two outdoor sirens are installed the connection lines between siren and power supply must be separate and the maximum length of each should not be more than 100 metres, while the sum of the two should not be more than 175 metres.
- The maximum length of the connections between the two furthest-away devices must not be more than 175 metres.
- The maximum length of the connections must not be more than 350 metres

MAXIMUM BUS CABLE LENGTHS

A = 100 m max
B = 100 m max

A + **B** = 175 m MAX
A + **C** = 175 m MAX
A + **B** + **C** = 350 m MAX



Note: During this check do not consider the connection between NC (normally closed) contacts and the corresponding interface module.

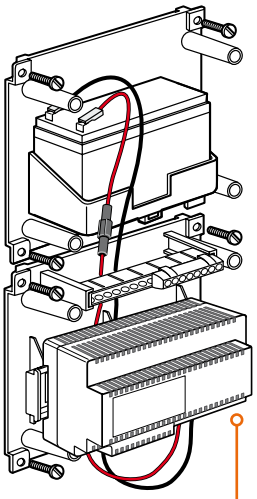
SYSTEMS WITH AND WITHOUT OUTDOOR SIREN

Traditional burglar-alarm systems - which require an outdoor siren as it is equipped with the back-up battery of the whole system - can sometimes cause inconvenience to neighbours in case of an alarm, especially in condominium flats. BTicino gives you the opportunity to avoid this drawback by using a specific power supply unit instead of the power supply E46ADCN. This power supply unit can be used for connecting a back-up battery (not supplied). It is easily available and necessary to power the system in case of power failure from the mains. The battery to be used with it must have the following features: 12 V, 7,2 – 24 Ah.

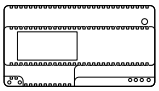
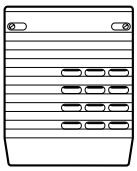
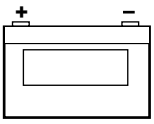
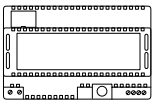
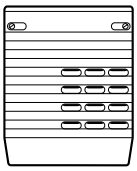
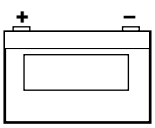
The power supply unit and the battery are installed in wall mounted enclosures F115/8A and F115/8B which guarantee protection against tampering attempts thanks to special self-protection systems.
The outdoor siren is now considered optional: However, if you want to install it, use siren 4072A.

Warning: in order to install the devices and assure level 2 protection according to CEI 79-22 standard use wall mounted boxes fitted with tampering and tearing protection devices(to prevent units being pulled away).

These boxes are also needed when installing contact interfaces F482, or batteries with sizes not compatible with switchboards F115/8A.



Power supply E47ADCN

TYPE OF SYSTEM			
WITH OUTDOOR SIREN REQUIRED	 Power supply E46ADCN	 Siren 4072L	 Battery inside the siren 3505/12
WITH OUTDOOR SIREN OPTIONAL	 Power supply E47ADCN	 Siren 4072A	 Battery 12 V 7.2/12/24 Ah

Note: the table summarises the combinations implement based on the type of system to create.

System measurement

CHECK ELECTRICAL CONSUMPTIONS

After checking the length of the connections, it is necessary to determine the sum of the total currents absorbed by the devices installed. This verification will determine whether it is necessary to equip the system with 1 or 2 outdoor sirens or the type of battery to use. This is necessary in order to provide the most complex system with a minimum required autonomy of 24 hours, at a temperature of –25°C in case of power failure from the mains.

- if you use the E46ADCN power supply unit and the absorption is less than 150mA, you will only need to install a siren 4072L; if the absorption is higher than 150mA, it will be necessary to install 2 sirens 4072L; However, the total absorption must not exceed 300mA. For both cases, a 24 hour duration is guaranteed.
- if you use the E47ADCN power supply unit, you will only need to install a 7.2 Ah, 12 Ah or 24 Ah battery. The following chart indicates the maximum absorption required by the system, according to the battery installed and to the level of autonomy required. However, the maximum absorption must not exceed 700 mA. The maximum consumptions of the self-powered devices have already been deducted from the maximum current that can be supplied by the power supply unit.

MAXIMUM CURRENT DELIVERED TO THE DEVICES ON THE BUS WITH POWER SUPPLY E47ADCN

AUTONOMY IN CASE OF LACK OF NETWORK	TYPE OF BATTERY INSTALLED		
	7.2 Ah	12 Ah	24 Ah
24 h	110 mA (*)	190 mA (*)	380 mA
15 h	180 mA	300 mA	600 mA
8 h	340 mA	560 mA	700 mA

(*) In this case the system complies with level 2 of the CEI 79-2 standard.

MAXIMUM CURRENT DELIVERED TO 12 V DEVICES WITH POWER SUPPLY E47/12
(This power supply is used, for example, in IR barriers)

AUTONOMY IN CASE OF LACK OF NETWORK	TYPE OF BATTERY INSTALLED		
	7.2 Ah	12 Ah	24 Ah
24 h	300 mA (*)	500 mA (*)	1 A
15 h	480 mA	800 mA	1,6 A
8 h	900 mA	1.5 A	2 A

(*) In this case the system complies with level 1 of the CEI 79-2 standard.
Note: in order to ensure level 2 performances according to CEI 79-2 standard in case of lack of network power supply, use batteries capable of ensuring system autonomy for at least 24 hours.

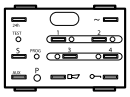
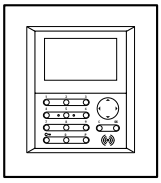
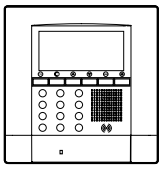
TABLES OF UNIT ABSORPTIONS

DEVICE	ABSORBED CURRENT
4 zone central unit	25 mA
Central unit 3486	50 mA (stand-by) – max 120 mA
Central unit 3485	55 mA (stand-by) – max 90 mA
Central unit 3485B; HC/HD/HS/L/N/NT4601	50 mA
Activator	8 mA
Transponder reader	12 mA
Zone divider 1 – 4; Zone divider 1 to 4 transponder	15 mA
5 - 8 zone expander	10 mA
Disconnector with key	5 mA
Keypad connector with display	28 mA
Keypad connector	5.5 mA
Fixed sensitivity IR detector; Passive IR detector; Passive IR articulated detector	4.5 mA
Dual-technology detector	5 mA – 35 mA **
IR barriers	50 mA
Contact interface	5 mA
Contact interface - 12 V	5 mA *
Contact interface - 2 DIN mod.	6 mA
Interface 3480	5 mA
Relay actuator	20 mA
Technical alarm interface	6 mA
Radio receiver	15 mA
Indoor siren	8 mA
Outdoor siren 4072A	5 mA
Interface F422	2 mA

Note: Plus the absorption of the detector connected to it*
*** Consider: - 35mA for the first detector installed; 5 mA for all the others.*

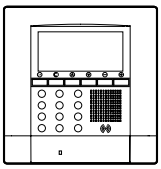
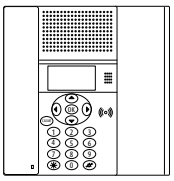
Each system can be made up of a minimum and maximum number of devices as shown in the following tables.

CENTRAL UNIT FOR MAX. 36 SENSORS

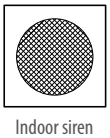
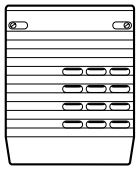
	 L/N/NT4600/4, AM4600/4		 HC/HD/HS/L/N/NT4601		 3485B	
	Minimum No.	Maximum No.	Minimum No.	Maximum No.	Minimum No.	Maximum No.
KEYS						
IR remote control	1	MAX 30 in total	Not managed	Not managed	Not managed	Not managed
Radio remote control	0		0	MAX 20 in total	0	MAX 20 in total
Transponder	0		0		0	
Numeric code	0		0		0	
ACTIVATORS AND DIVIDERS						
Keypad connector with display	0	9 for each zone 0 – 4 (total 45)	0	9 for each zone 0 – 4 (total 45)	0	9 for each zone 0-4(total 45)
Keypad connector	0		0		0	
Transponder reader or Divider transponder	0		0		0	
IR activator, zone 1-4 divider	0	9 (in total)	Not managed	Not managed	Not managed	Not managed
Disconnector with key	0	1	0	1	0	1
DETECTORS						
(IR and contact interface)	1	9 for each zone 1-4 (total 36)	1	9 for each zone 1-4 (total 36)	1	9 for each zone 1-4 (total 36)
Technical alarm interface and actuator relay	0	9	0	9	0	9
Radio receiver	0	9 for each zone 0-4 (total 45)	0	9 for each zone 0-4 (total 45)	0	9 for each zone 0-4 (total 45)

System measurement

CENTRAL UNIT FOR MAX. 72 SENSORS

	 3485		 3486	
	Minimum No.	Maximum No.	Minimum No.	Maximum No.
KEYS IR remote control	Not managed	Not managed		
Radio remote control	0	MAX 50 in total	0	MAX 50 in total
Transponder	0			
Numeric code	0			
ACTIVATORS AND DIVIDERS: Keypad connector with display	0	9 for each zone 0 – 8 (total 81)	0	9 for each zone 0 – 8 (total 81)
Keypad connector	0		0	
Transponder reader or Divider transponder	0		0	
IR activator, zone 1-4 divider with 5-8 expansion unit	Not managed	Not managed	0	9 in total
Disconnector with key	0	1	0	1
DETECTORS (IR and contact interface)	1	9 for each zone 1 – 8 (total 72)	1	9 for each zone 1 – 8 (total 72)
Technical alarm interface and actuator relay	0	9 for each zone 1 – 8 (total 72)	0	9 for each zone 1 – 8 (total 72)

NUMBER OF SIRENS

	 Indoor siren		 Outdoor siren	
	Minimum No.	Maximum No.	Minimum No.	Maximum No.
E46ADCN	Not managed	3 (2 if a central unit with display is installed)	Not managed	2 (4072L)
E47ADCN	0	3 (1)	0	2 (4072A)

NOTE (1): the total number of internal/outdoor sirens must not exceed 3. Example: 2 indoor sirens and one outdoor siren.

Example: apartment burglar-alarm system

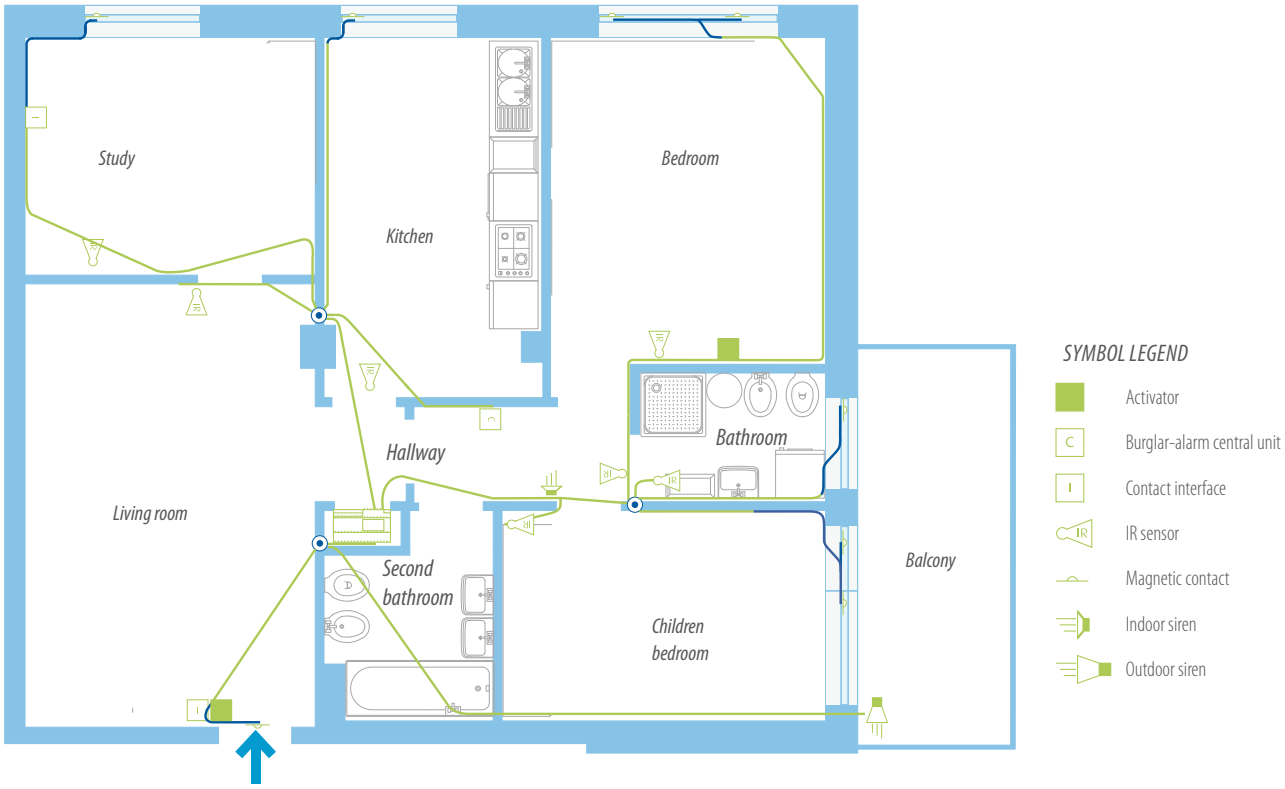
100 m^2 apartment on the ground floor of an apartment complex, with balcony and continuous vertical protection parapet on one side.
The main entry consists of a door, while all French windows can be considered as alternative accesses.
These access ways are all controlled by magnetic contacts.
In view of the position, it is recommended that volumetric detectors are installed in all rooms, thus increasing the level of safety.
This will also make the system easier to manage.
It is recommended that volumetric systems are always installed, as the intruder may be able to break through the physical barriers (rolling shutters/window glass) without actually opening the door or window.
In this case, the magnetic detector on the opening would in fact be unable to generate the alarm.
This type of setup would also give the user the possibility to customise the system to meet personal needs.
This gives clear advantages on a management point of view.
For example:

- perimeter protection can be used during the night;
- volumetric sensors can be armed, whilst leaving perimeter sensors disarmed, during short absences.

To ensure this flexibility, the various sensors should be grouped appropriately.
In this case, the system can be divided as follows:

- magnetic contact and volumetric detector for the living room: zone 1;
- magnetic contacts for doors and windows: zone 2;
- daytime area volumetric detectors (kitchen, studio): zone 3;
- sleeping area volumetric detector (bedrooms, hallways, service bathroom); zone 4;

Arrangement of the components and wiring layout



Example: apartment burglar-alarm system

The power supply unit can be installed in the area of the electric distribution board.
The central u-itnit must be installed in a protected area, that can be reached easily by the user.
In order to facilitate arming of the system, an auxiliary transponder arming device should also be included.
If installation of the arming device on the outside of the property is not possible or desired, the activation of the volumetric sensor of the living room should be delayed. On the other hand, if the arming device is installed outside, zone 1 will be activated without delay.
The system will be completed by the installation of an indoor siren in the hallway area, so that the intruder will be confused by the high noise, and disturbed, and will be unable to hear the police force approaching.
An outdoor siren with optic diffuser shall also be installed outside on the balcony, for easy identification from the outside, of the system in alarm state.
When positioning the volumetric sensors, it will be necessary to check the coverage area and comply with the recommendations of the following pages.
Using the system diagram, ensure that 24 hour autonomy is guaranteed with only one outdoor siren.
During the installation of the system, the job of the installer can be made easier by filling a “system card”, including all the configuration information in one document, as well as consumptions and positioning of the devices. The card will also be useful after installation should, for example the system need extending. Detailed information on the compiling and use of the “system card” can be found in the system manuals.

LIST OF ITEMS REQUIRED

DESCRIPTION	ITEM	CONSUMPTION	QUANTITY
Central unit with dialling device	3486	50 mA	1
Transponder activator	L4607	12 mA	2
Transponder	3540		4
Power supply	E46ADCN		1
Jointed pass. IR detector	L4611	4.5 mA	7
Contact interface	3480	5 mA	2
Outdoor siren	4072L		1
Indoor siren	4070	5 mA	1
Outdoor siren storage battery	3505/12		1
Indoor siren storage battery	3505/6		1
Anti-tamper device	L4630		13
Magnetic contact	*		8
Configurators	3501K		1

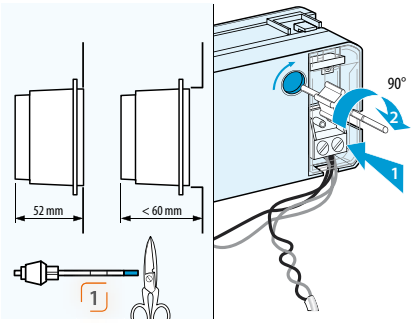
** item to be selected based on the doors and windows characteristics*

Installation of modular devices

IN FLUSH MOUNTED BOXES

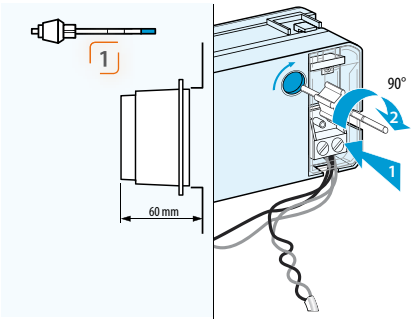
The wire burglar-alarm system is compatible with systems made using the AXOLUTE, LIVINGLIGHT and MÀTIX series and therefore uses the same boxes, supporting frames and cover plates. When using standard flush mounted boxes (depth 52 mm) embedded in the mortar level with the plaster/tile, or in any cover where the maximum depth from the bottom of the box to the finished wall is less than 60 mm, cut the tamper rod (1) at the first reference notch, insert it in the appropriate housing, rotate it 90° and then remove it completely.

500 - 503E - 504E - 506L

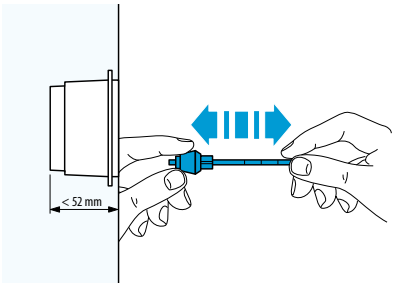


However, if the maximum depth from the bottom of the box to the finished wall plane is 60 mm, insert the appropriate rod protection device (tamper) in its housing (1), rotate it 90°, and remove it completely.

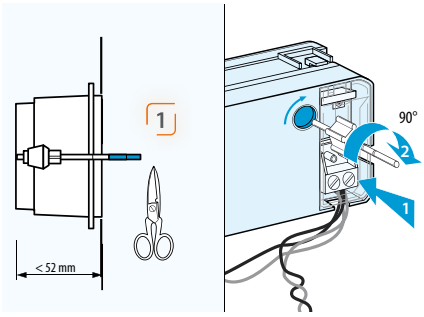
500 - 503E - 504E - 506L



If the flush mounted box is different from the BTicino standard (box with reduced depth, less than 52 mm), proceed as follows: completely remove the tamper rod.



Place the tip to the bottom of the box without pushing too hard and cut the rod level with the box. Insert the rod (1) protection device (tamper) in the appropriate housing, rotate 90°, and remove completely.



Fix the devices to the flush mounted boxes.

Warning: the use of the tamper rod for the protection of FLUSH MOUNTED BOXES devices with BTicino supports is a necessary requirement to assure level 2 protection in accordance with CEI 79-2 standard. For the selection of the flush mounted boxes see the General Installation Catalogue.
Check that there is no damage at the bottom of the box in the tamper rod working area. Take the necessary measures to solve any problems.

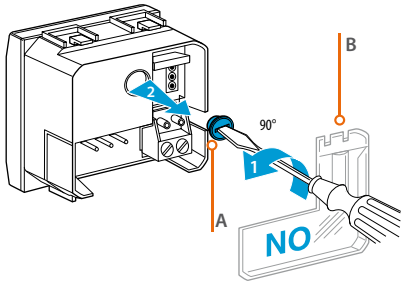
IN WALL MOUNTED BOXES

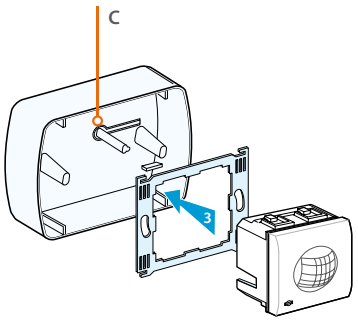
This series of boxes already has a supporting frame for the devices and the LIVINGLIGHT boxes have white cover plate. When installing modular devices inside wall mounted boxes or corner boxes proceed as follows:

- Remove the cap (**A**) from the bottom of the devices by rotating it 90°;
- Do not fit the clear protection cover (**B**).

Fit the devices inside the wall mounted (or corner) boxes.
In this case, the anti-tamper protection (**C**) is already on the box.
Pay attention to ensure that the tamper rod of the box fits perfectly in the preset hole at the back of the device.

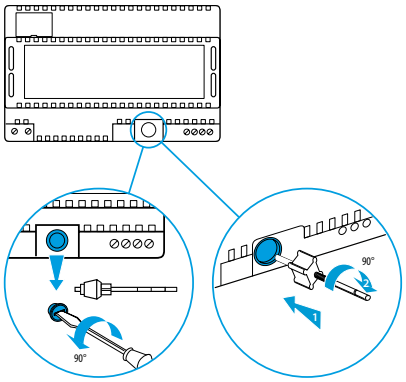
Warning: BTicino wall mounted boxes are suitable for installation of devices with level 1 performance. For level 2 performance (CEI 79-2 standard) use the box 502PA for angle installation.





Modular power supplies

All the power supplies are sold with "Tamper" device against the opening of the switchboard.
Depending on the power supply being used, two types of installations are possible.

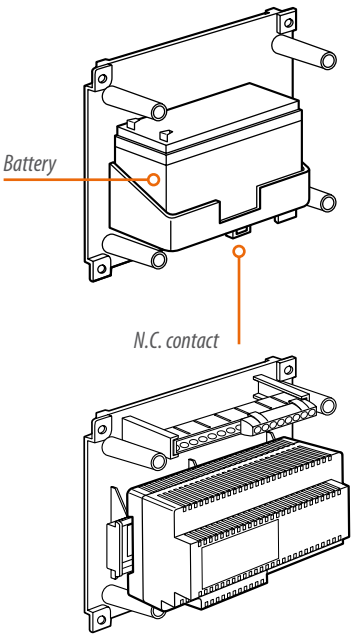


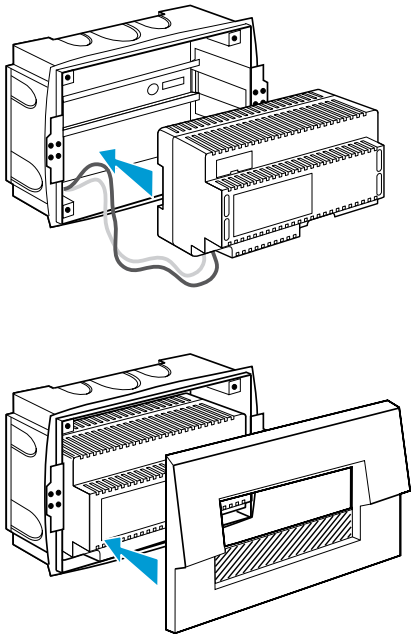
Installation of power supply E47ADCN - E47/12

These devices are installed inside the switchboard F115/8A.
If required, install the back-up battery(ies) in the appropriate housing of the 7.2 Ah enclosure F115/8B.
For batteries of higher capacity check the compatibility with the F115/8B enclosure. When the N.C. contact is also being used for additional tampering protection of the battery, connect the contact on the F115/8B enclosure to a tamper line of the system.
Warning: for batteries of sizes not compatible with F115/8B enclosures use the required DIN switchboard in the general BTicino catalogue.
In order to assure level 2 performance in accordance with CEI 79-2 standard, it will be necessary to use wall mounted switchboards with opening and tear protection. If the power supply is installed in switchboards without door, ensure that it is not subjected to water sprays.

Installation of power supply E46ADCN

These devices are installed inside standard flush mounted or wall mounted switchboards.
Warning: In order to assure level 2 performance in accordance with CEI 79-2 standard, it will be necessary to use flush mounted switchboards with opening protection, or wall mounted switchboards with opening and tear protection. If the power supply is installed in switchboards without door, ensure that it is not subjected to water sprays.
Ensure that the vents are not obstructed. A two-pole thermal magnetic circuit breaker with contact separation of at least 3 mm must be used, positioned near the power supply. The function of the circuit breaker is to disconnect and protect the power supply.
NOTE: For more information and for the wiring requirements refer to the instructions supplied with the power supplies.





Central unit with display

WALL MOUNTED INSTALLATION

After fixing the base and performing all connections, install the central unit ensuring that the cables are arranged in a way that they will not be damaged. **NOTE Before installing the burglar-alarm central unit ensure that the sliding switch on the back is in the ON position.**

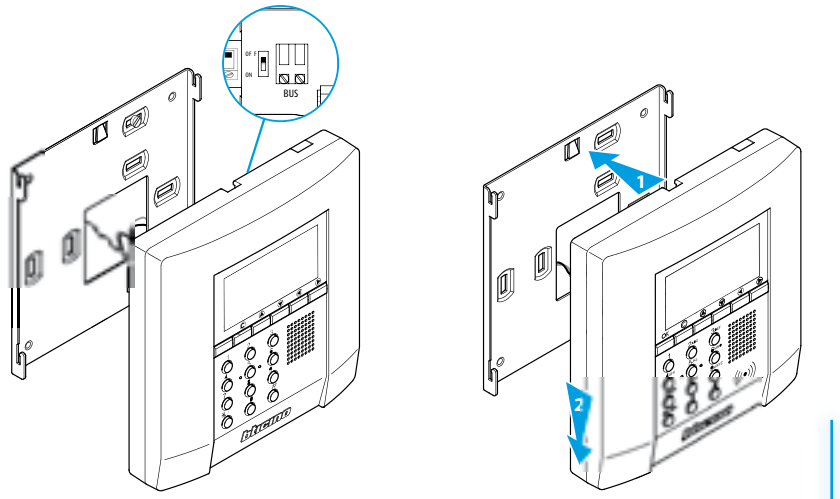
WARNINGS FOR ALL CENTRAL UNITS

Warning: both in wall mounted installation and in MULTIBOX switchboards, in order to ensure compliance with level 2 of CEI 79-2 standard, it will be necessary to use the 3484 tamper for the protection of the GSM antenna, as explained in the installation manual of the central unit.

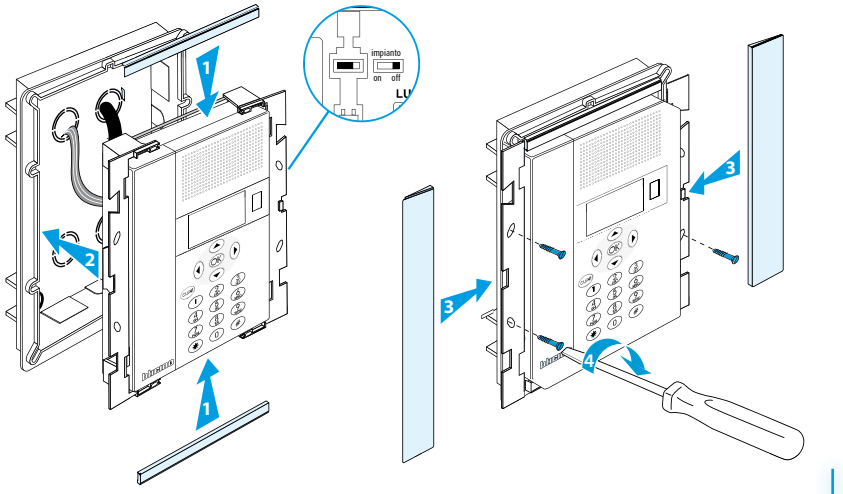
PROTECTION OF PSTN CENTRAL UNITS FROM LIGHTNING

It is good practice to protect the system from lightning by using surge protective devices, SPD, belonging to class II.

For the protection of burglar-alarm central units 3485 and 3486 from surges from the telephone line, the use of the PLT1 device is recommended, connecting the corresponding earth clamp to the "earth" reference of the SPD limiter installed in the apartment switchboard. For further details refer to the instructions supplied with the central units or the relevant TECHNICAL SHEETS.

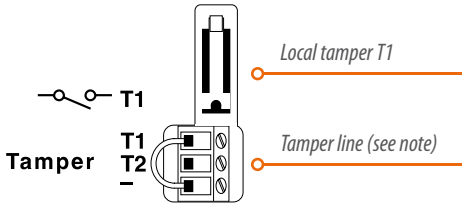


Wall mounted installation of 3485 or 3485B central units. This same method is also used for the installation of the 3486 central unit.



Installation of the 3486 central unit inside a MULTIBOX switchboard.

NOTE: the central units are supplied with the tamper line clamps (-/T1) circuited for the use of the local tamper T1 (wall mounted installation with metal base). This is compulsory to ensure that the central unit complies with level 2 of CEI 79-2 standards in terms of possible tampering (tear protection). For installations inside MULTIBOX boxes ensure the connection of a NC circuit breaker to the -/T1 clamps for the tamper function. For further information see the central unit installation manual.

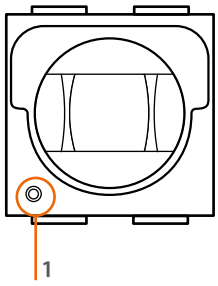


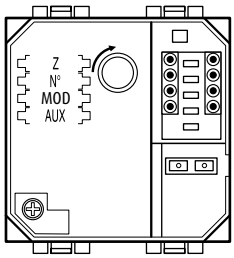
IR detectors

ADJUSTABLE IR DETECTOR HC/HS/L/N/NT4611

In addition to the indications shown for the installation of modular devices, also take into account that before installing the swivel IR sensor the adjustment fixing screw (1) at the back of the detector must be loosened in order to allow the detector to turn.

Note: the screw will be tightened after the "System test" and protected zone check, thus setting the central unit in "maintenance" mode.





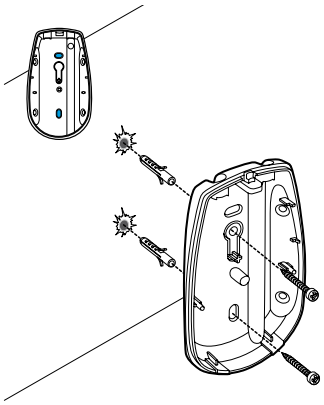
RADIO IR DETECTOR 3440

Two installation modes are possible:

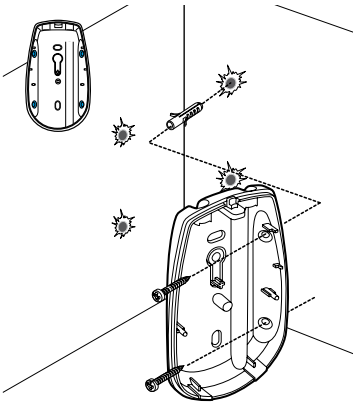
- Wall mounted installation
- Angle installation

Before permanently securing the object ensure that the radio communication with the HC/HD/HS/L/N/NT4618 receiver is working correctly.

WALL MOUNTED INSTALLATION



ANGLE INSTALLATION

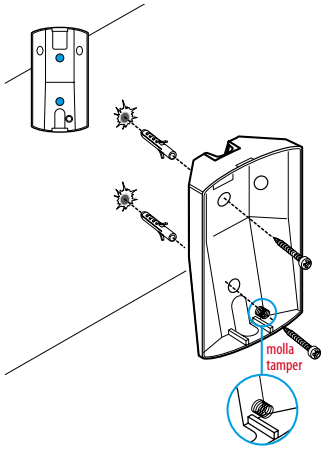


IR MINI DETECTOR N4640 AND N4640B

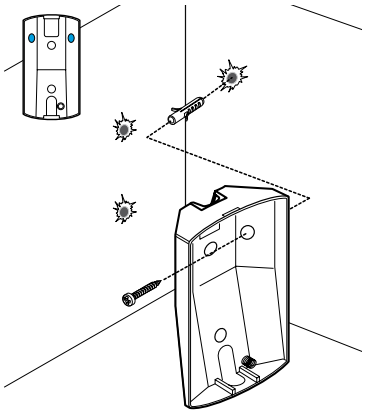
The base of the detector has a particular shape that enables wall mounted installation in 4 different modes:

- Wall mounted installation
- Angle installation
- Front angle installation
- Tilted angular installation

WALL MOUNTED INSTALLATION



ANGLE INSTALLATION

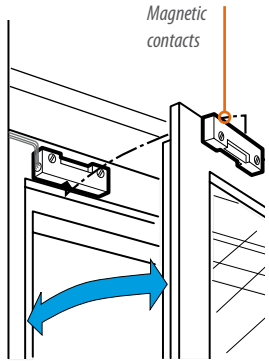


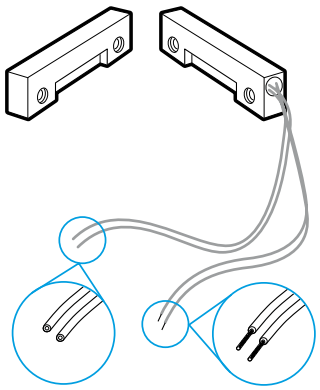
Note: for other installation modes see the instruction leaflet.

Various sensors

LAYOUT FOR MAGNETIC CONTACTS

During the installation of the magnetic contacts, if a specific underground conduit is not being installed, ensure appropriate surface trunking up to the jambs of doors and windows. The wires of the contacts will then have to be run to the point on the door or window, where the sensor is being installed. The contact wires have a reduced section, which will not cause any problems when refitting the jambs.

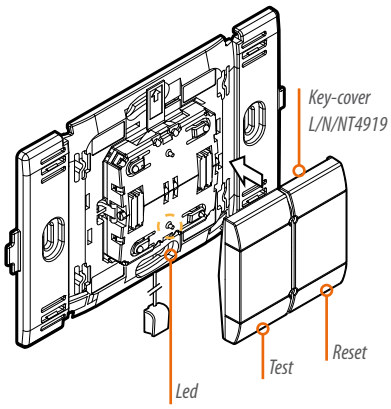


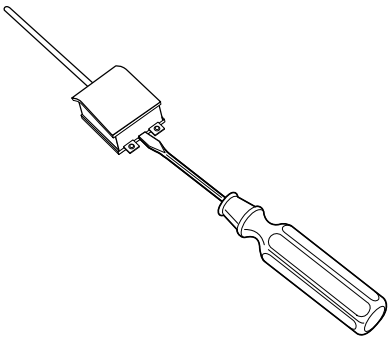


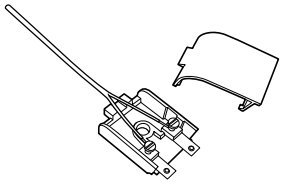
FLOODING DETECTOR HA/HB/L/4619

Fix the device to the wall using double sided adhesive tape or screws and plugs. After completing the configuration fit the key covers using the spacers supplied.

Note: If the sensor cable needs shortening, cut the excess off and connect to the probe terminals.





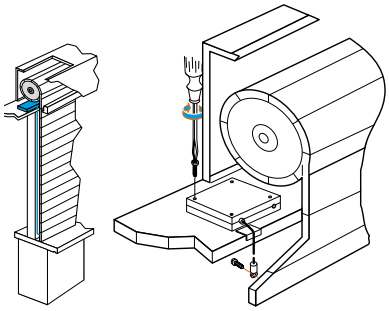


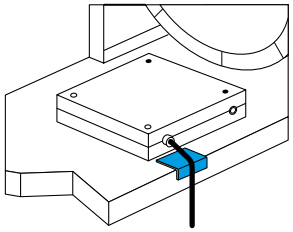
DETECTOR FOR SHUTTERS

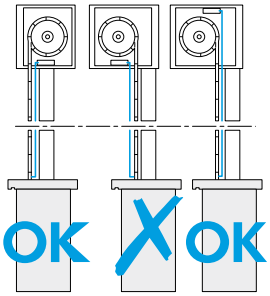
Place the rope contact preferably in the middle of the rolling shutter box and then fasten it. Then fasten the end of the rope to the rolling shutter with a screw. The rope can be extended up to 3.4 m.

NOTE: The rope must be set between the window and the rolling shutter. Check condition of rope and its sliding movement periodically.

In order to prevent the rope from rubbing against a sharp part of the rolling shutter, you can glue a square (not supplied) using double-sided adhesive tape.





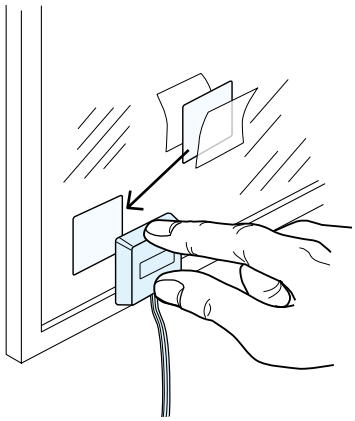


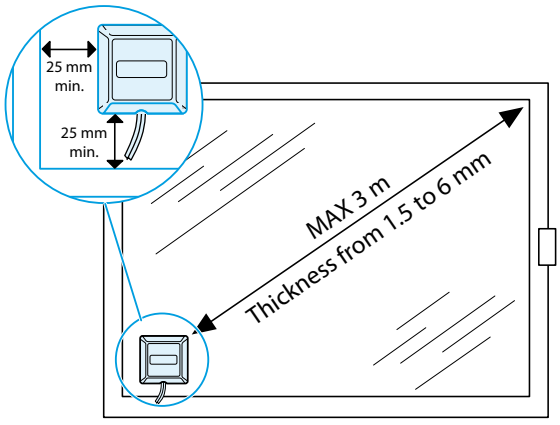
Various sensors

PIEZOELECTRIC WINDOW-BREAKING DETECTOR 3516/3444

The detector must be applied to the glazed part to be protected using the special double-sided adhesive tape (supplied).

The glazed part must be between 1.5 and 6 mm thick; the diagonal length must not exceed 3 m (Fig. 1).

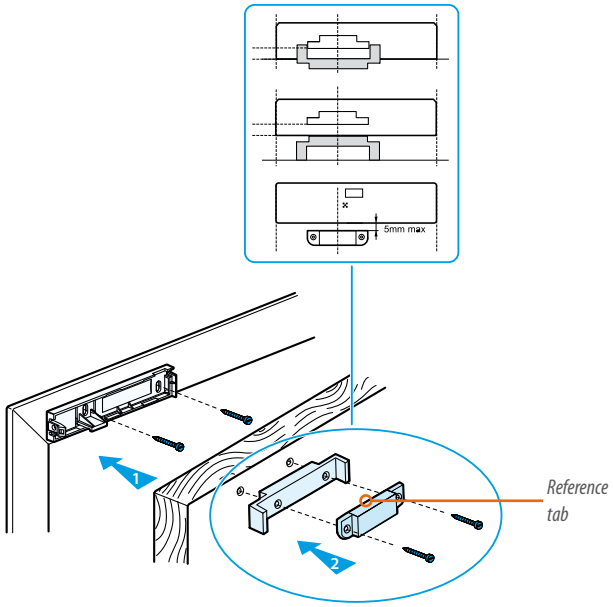


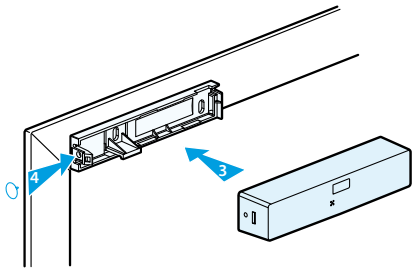


Note: Clean and dry glasses before applying the detector. Press hard to ensure optimum adhesion.

RADIO MAGNETIC CONTACT 3442

The device must be installed inside the house, on doors and windows, including sliding ones, and similar openings, as shown in the figure; the magnetic contact must be fixed in place using the appropriate position adjustment spacers, in order to activate the alarm as soon as the movable part of the door or window starts to move away.





Note: To ensure correct positioning align the reference notches of the magnetic contact of the transmitter

IR BARRIERS 3518 – 3518/50
3518/150 – 3519

The two columns must be installed one in front of the other (Fig.1) in the same direction (both terminal boards placed at the top side or bottom side) (Fig.2); the height must be as close as possible to the ground or to the lower part of the window (Fig.3), with no fixed or removable obstructions that may interfere with the rays (Fig.4) so that the receivers are not directly exposed to sunrays (Fig.5) and are not exposed to the rays of other transmitted, either directly or by reflection.

Each column consists of:

- Aluminium section bar
- Top terminal (base + cover + screw)
- Bottom terminal (base + cover + screw)
- 4 screws + 4 screw anchors for wall mounted

Installation.

Follow the instructions on the instructions leaflet, taking into account the following requirements:

- The cable can be inserted from the bottom (inside the wall), or from the outside (exposed). In this case open (break) the cable passage hole at the base of the unit.
- The terminal strips can be temporarily removed to help cable connection.
- For the electric connection, refer to the "Connection diagrams" section.

WARNING: Do not use a shielded cable when connecting the barriers to the contact interface.

fig. 1

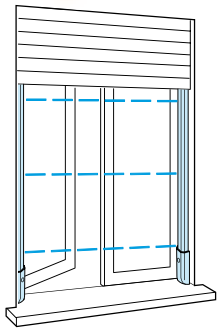


fig. 2

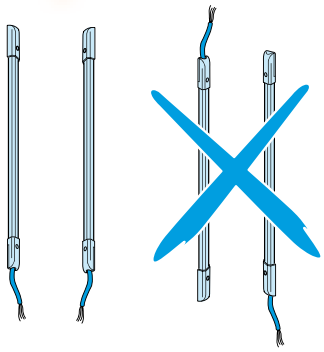


fig. 3

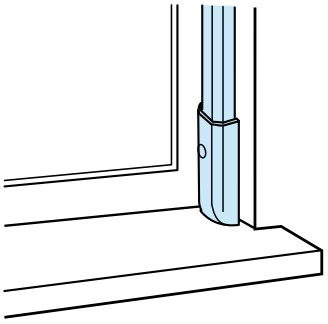


fig. 4

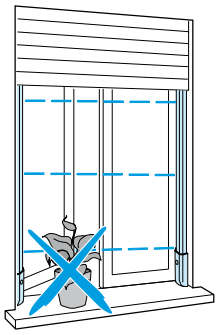
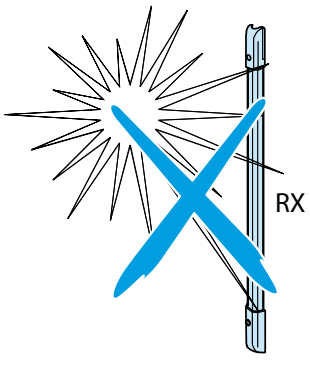


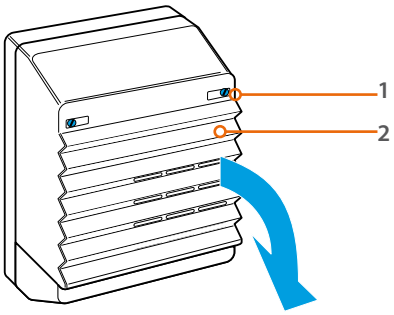
fig. 5



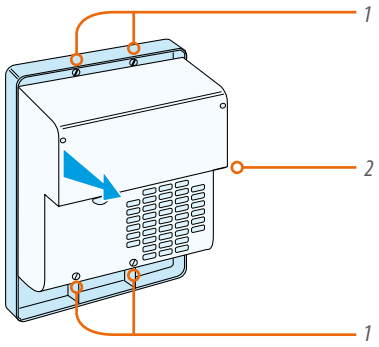
Note: for further information see the instruction leaflet supplied with the barriers

Outdoor siren

1. Remove the two screws (1) and take off the external cover (2).

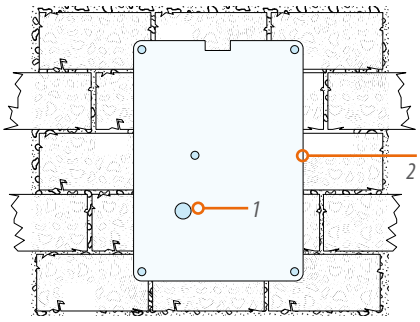


2. Remove the four screws (1) and pull out the internal protection cover (2).

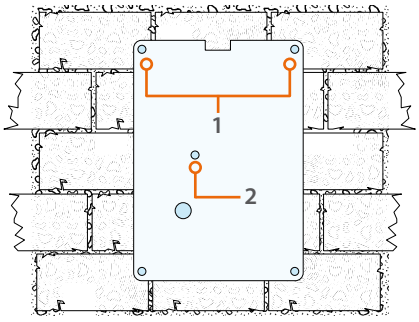


3. By using the drilling template (1), position the hole (2) near the wire-outlet pipe and scribe the 5 holes.

NOTE: use a Ø 6 mm bit for drilling the holes.

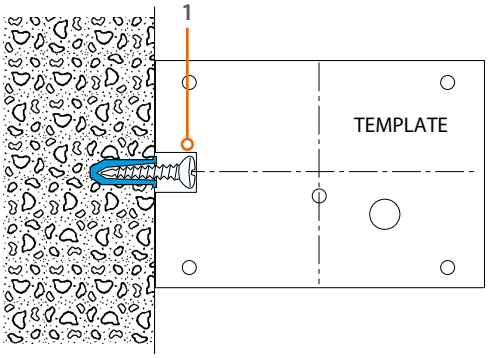


4. Insert the screw plastic plugs into the holes and partly tighten the top screws (1) and the "tamper" screw (2).

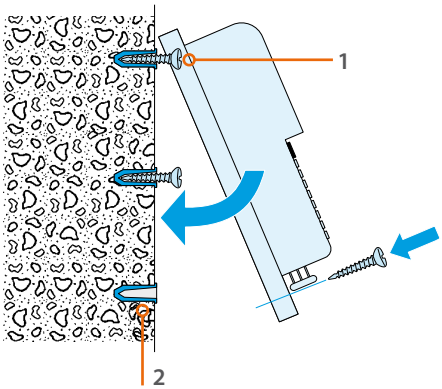


5. Adjust the "tamper" screw by using the notch (1) on the drilling template, as shown in the picture.

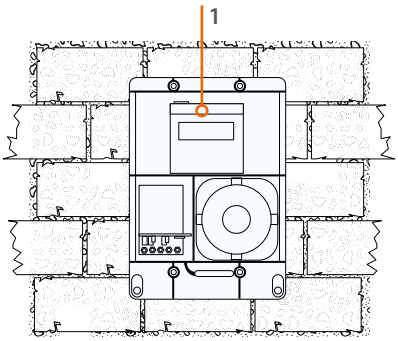
Warning: If the installation or the adjustment of the tamper screw is carried out incorrectly, the system will not work.



6. Attach the siren to the two top screws (1). Tighten the two bottom screws (2). Tighten the four screws completely.



7. Put the battery (1) or 12V-12Ah battery - into the special housing without connecting the Faston terminals. Connect the electronic card as shown in the instruction leaflet supplied with the siren.

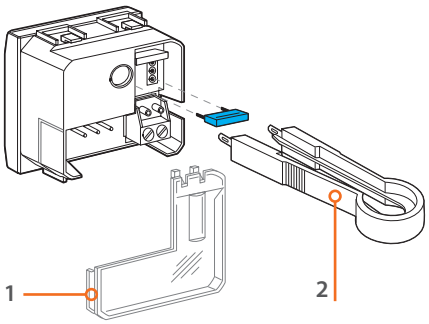


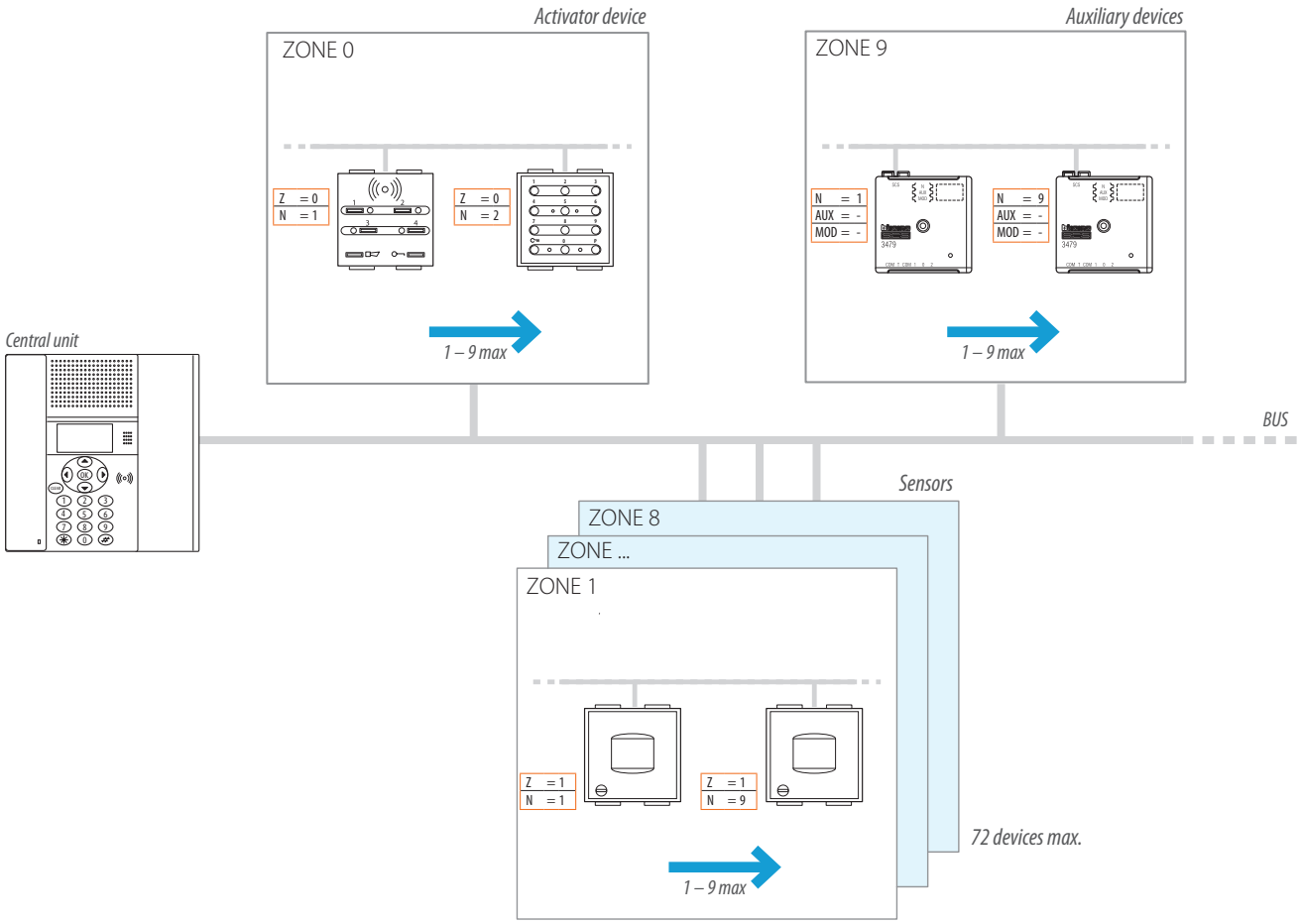
General concepts

Configuring the devices of the burglar-alarm system means assigning them their respective addresses and operating modes
The address allows you to solely identify each device within the system; conversely, the operating modes are the specific functions performed by each device (central unit, detectors, sirens, etc.).
In addition to the typical functions of any burglar-alarm system, such as the tripping delay of a detector or the management of a balanced contact line, it is possible – through the configuration of the operating mode – to enable the devices in order to perform special functions such as the management of technical alarms (gas leaks, floods, etc.) or alarm signalling by means of auxiliary channels.
The address of the device is determined by assigning a value to the positions:
Z to specify the number of the assigned zone (compulsory) of the device, if this belongs to the group of detectors. If the device belongs to the group of connectors, this position must not be configured;
N to specify the progressive number (compulsory) of the device within the above-mentioned zone.

CONNECTION / REMOVAL OF CONFIGURATORS

Before configuring the devices remove the clear protection cover (1).
To facilitate connection or removal of the configurators use the appropriate tool (2).

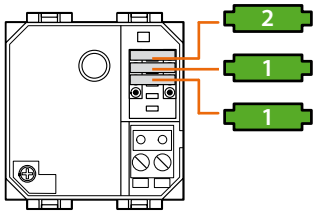




General concepts

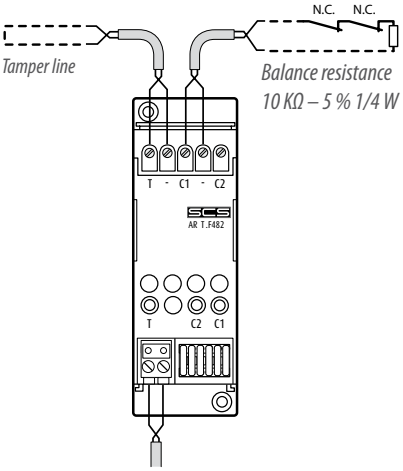
Example of IR detector configuration. First sensor belonging to zone 2, with pulse count function enabled.

CONFIGURATOR POSITION	VALUE
Z	2
No.	1
MOD	1
AUX	none



Example of contact interface configuration. Fourth sensor of zone 3, with balanced protection of the contact line.

CONFIGURATOR POSITION	VALUE
Z1	3
N1	4
MOD1	1



AUXILIARY CHANNELS

In addition to the typical functions, the devices of the My Home Burglar-alarm system can also perform a range of functions independent from the status of the burglar-alarm system itself (armed or disarmed). This is possible thanks to a particular communication channel of the burglar-alarm and automation bus, called auxiliary channel, used by some devices (such as the auxiliary channel interface or the radio receiver) for the transmission of information such as health emergency, robbery emergency etc. In order to better clarify this concept, the burglar-alarm system may be compared to a 3 lane road, with the first one used for the transit of police cars (information connected to intrusions or burglary), while the second is for service cars (information connected with the operation of the system), and the third lane is for emergency services (information connected with auxiliary alarms or events).
Auxiliary devices are capable of handling the sets of information from the three lanes and act accordingly, based on their configuration.
If the there is any information connected to intrusion events, the devices activate local signallings (sirens), or remote signallings (telephone dialling devices); if on the other hand the information relates to technical alarms, based on the set operating parameters, the devices activate to generate alarm or prealarm signals, or to reinstate safety within the controlled environment. Some typical examples are the application for the automatic shutting off of the gas piping following the detection of natural gas leaks, described in this guide, and the operation of the burglar-alarm central unit in ADEMCO protocol mode (forwarding of telephone calls to vigilance bodies following a burglar-alarm or a technical alarm event).
In this case, when configuring the 3486 central unit, the use of the auxiliary channel with the type of technical alarm that generates the call is already set, as shown in the following table.

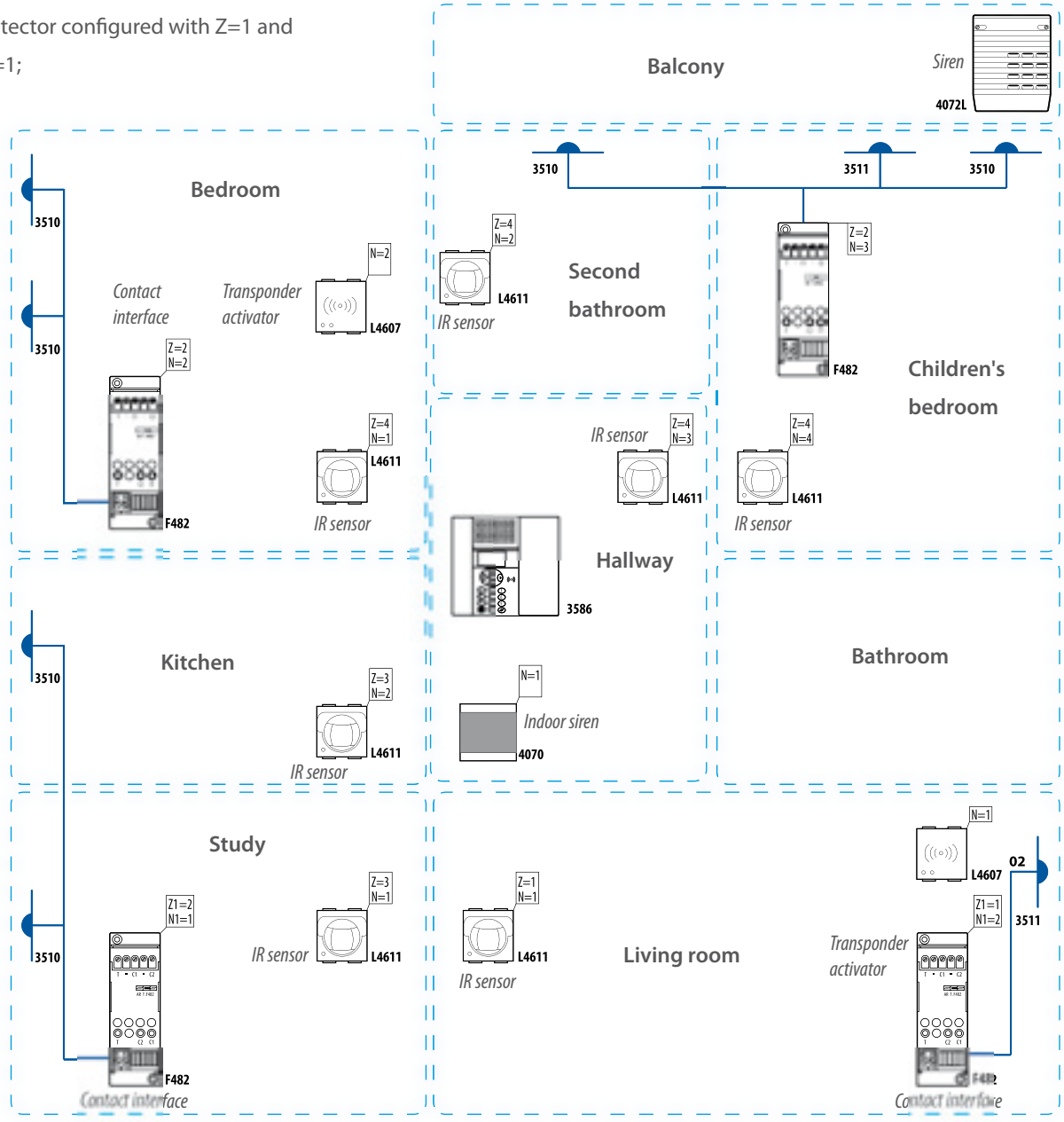
TYPE OF TECHNICAL ALARM	COMBINED AUXILIARY CHANNEL
Gas leak	1
Freezer	2
Flooding	3
Anti-panico	4
General technical alarms	5-6-7
Fire	8
Remote assistance	9

Configuration example

The following drawing shows the example of the configuration of the burglar-alarm system of the apartment described in the section "GENERAL RULES FOR INSTALLATION". The configuration of the devices depending on the area to be protected is the following:

- Zone 1 – living room: protected by a magnetic contact with interface configured with Z=1 and N=2 on the entrance door and a volumetric detector configured with Z=1 and N=1;
- Zone 2 – house perimeter: protected by magnetic contacts on the French windows and the windows, connected to three interfaces configured with Z=2 and N=1 - 3;
- Zone 3 – Kitchen and studio: protected by volumetric detectors configured with Z=3 and N=1, and Z=3 and N=2;
- Zone 4 – bedrooms, hallway, bathroom: protected by volumetric detectors configured with Z=4 and N=1 – 4.

Devices such as the indoor siren, the transponder connector, and the separator, are only configured in the N socket corresponding to the number of the device within the system.

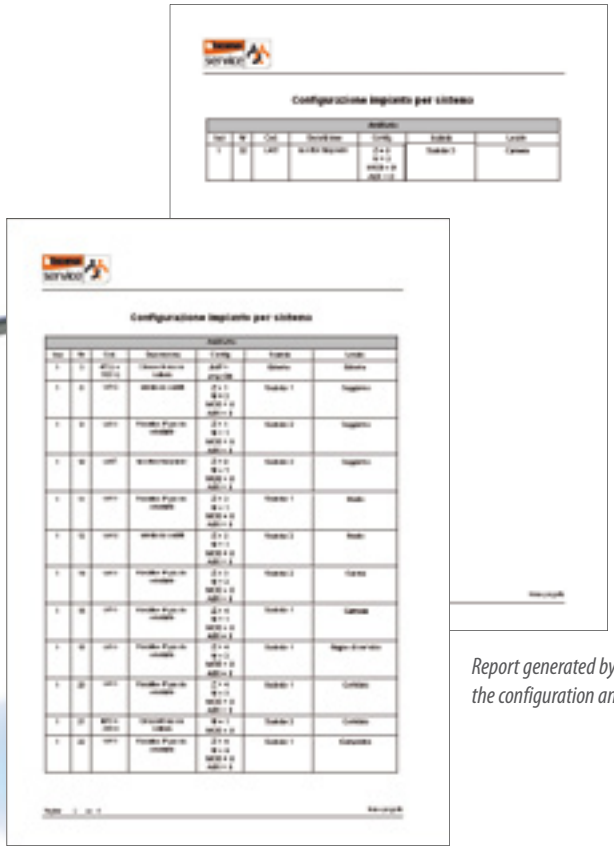


Use of the Youproject program for the configuration of the system

The configuration of the system can be performed using the appropriate design program called Youproject, conceived to automatically perform all the specific and predictable functions inside the home automation system (placement of devices, dimensional and electrical calculation, allocation of addresses, configuration of tables...).

The software produces a paper report with technical information for the installation of the system, which also includes the configuration, and the list of the necessary materials.

Youproject program screen with the data of the system to be configured



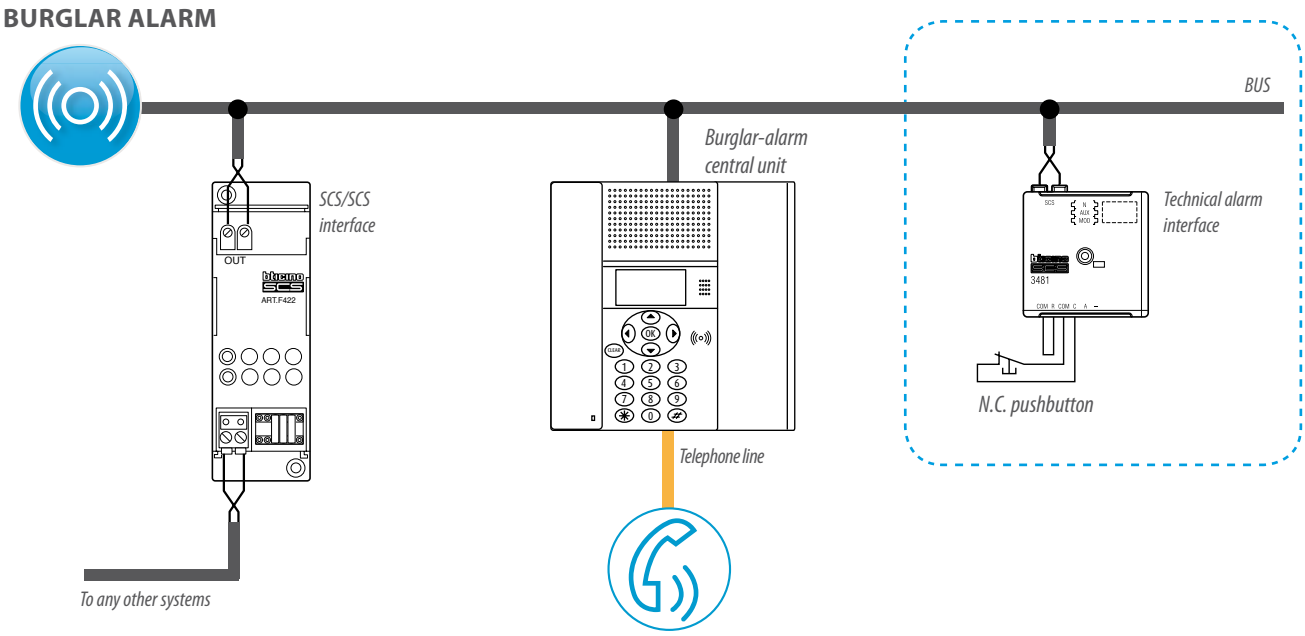
Report generated by the program with the configuration and the list of devices

Technical alarms: shop burglar-alarm

If there is a robbery, the assistant can press a hidden pushbutton which activates the burglar-alarm central unit telephone communicator which sends a request for assistance to the My Home Portal. This will warn the owner or people indicated by him, by means of:

- one or more telephone calls
- one or more sms (using the MY HOME portal)
- one or more e-mail (using the MY HOME portal)

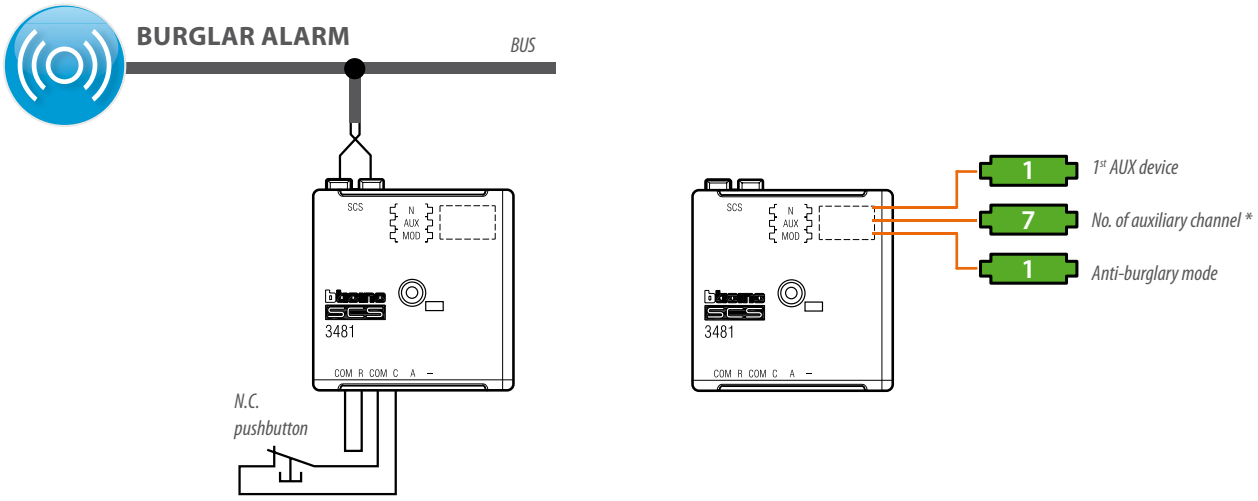
The activation does not generate a local sound alarm, so that the robber can be surprised, as he does not know that the call has been made. Suspend the call by means of the remote control on the burglar-alarm central unit.



CONNECTIONS AND CONFIGURATIONS

Technical alarm interface 3481

NOTE: the auxiliary channel number 7 must also be entered at the programming stage, on the burglar-alarm central unit, for coupling with the signalling message of the telephone communicator.*



Technical alarms: anti-panic alarm

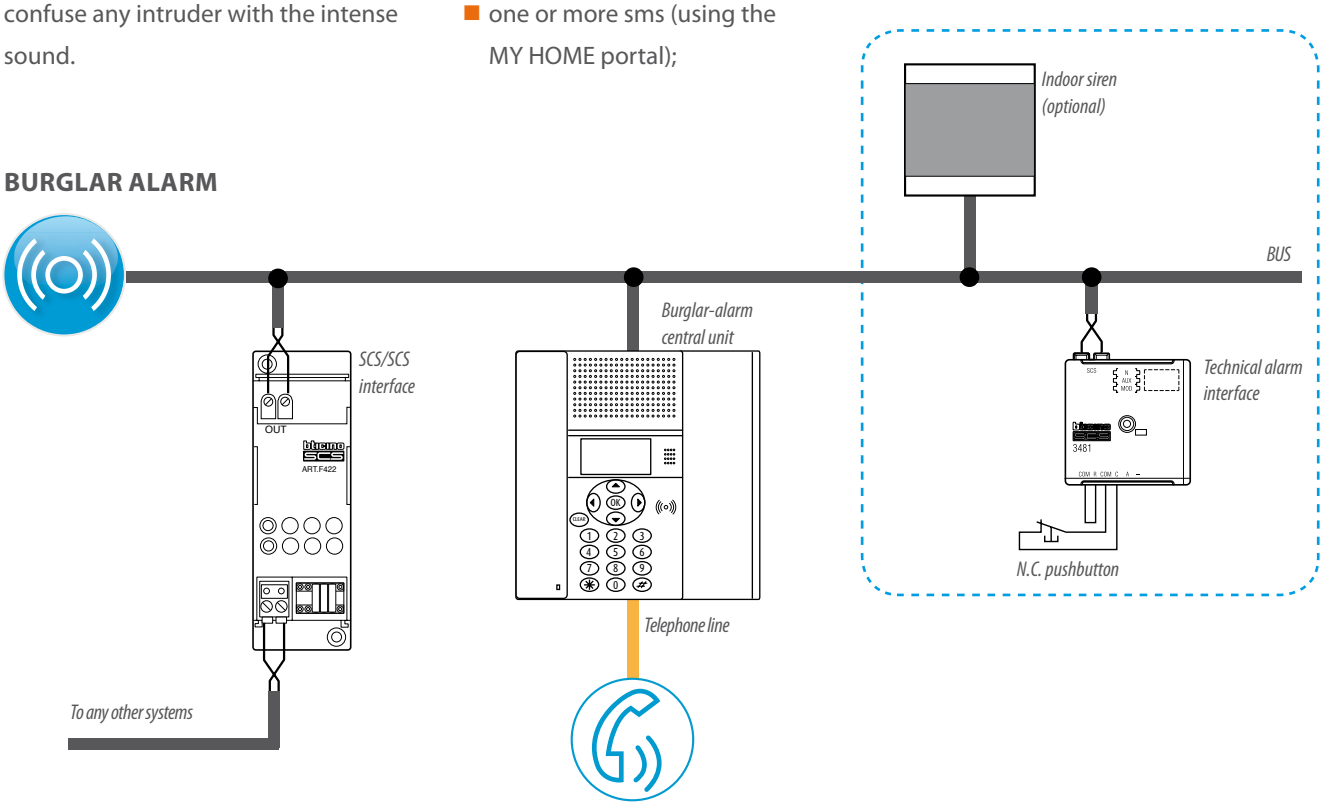
If the owner hears strange noises in the home, he presses a special pushbutton to activate all the Burglar-alarm system sirens (only with the system armed, otherwise only the indoor siren activates) to confuse any intruder with the intense sound.

The burglar-alarm central unit telephone communicator sends a request for assistance to the My Home Portal, which warns the owner or people indicated by him, by means of:

- one or more telephone calls;
- one or more sms (using the MY HOME portal);
- one or more e-mail (using the MY HOME portal).

This function can be activated with the burglar-alarm system switched on or off and in any division condition.

BURGLAR ALARM

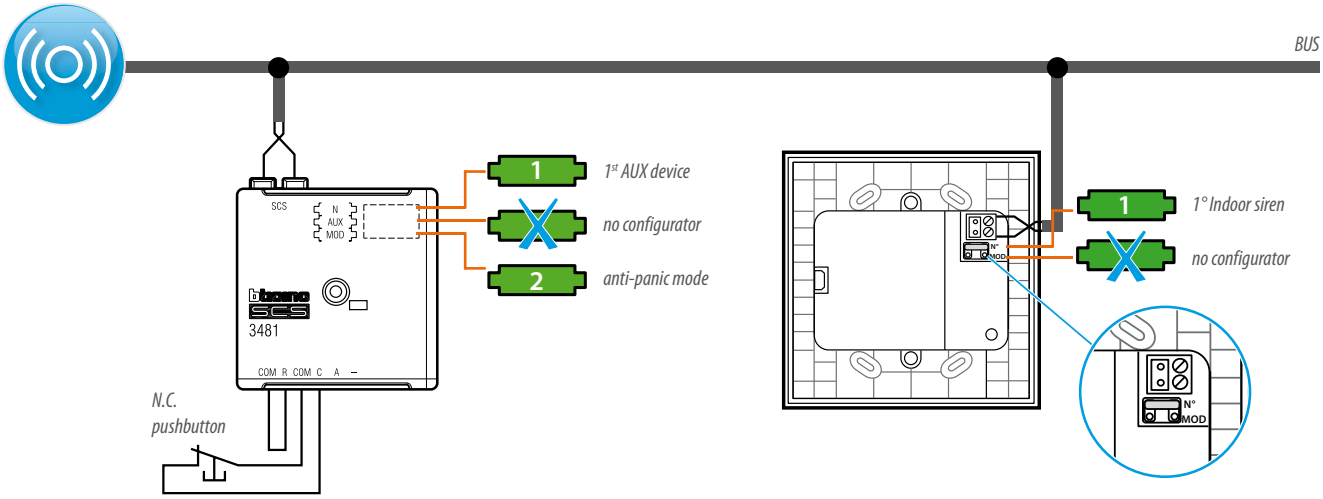


CONNECTIONS AND CONFIGURATIONS

Technical alarm interface 3481

Indoor siren HC/HD/HS/4070 - N/NT4070

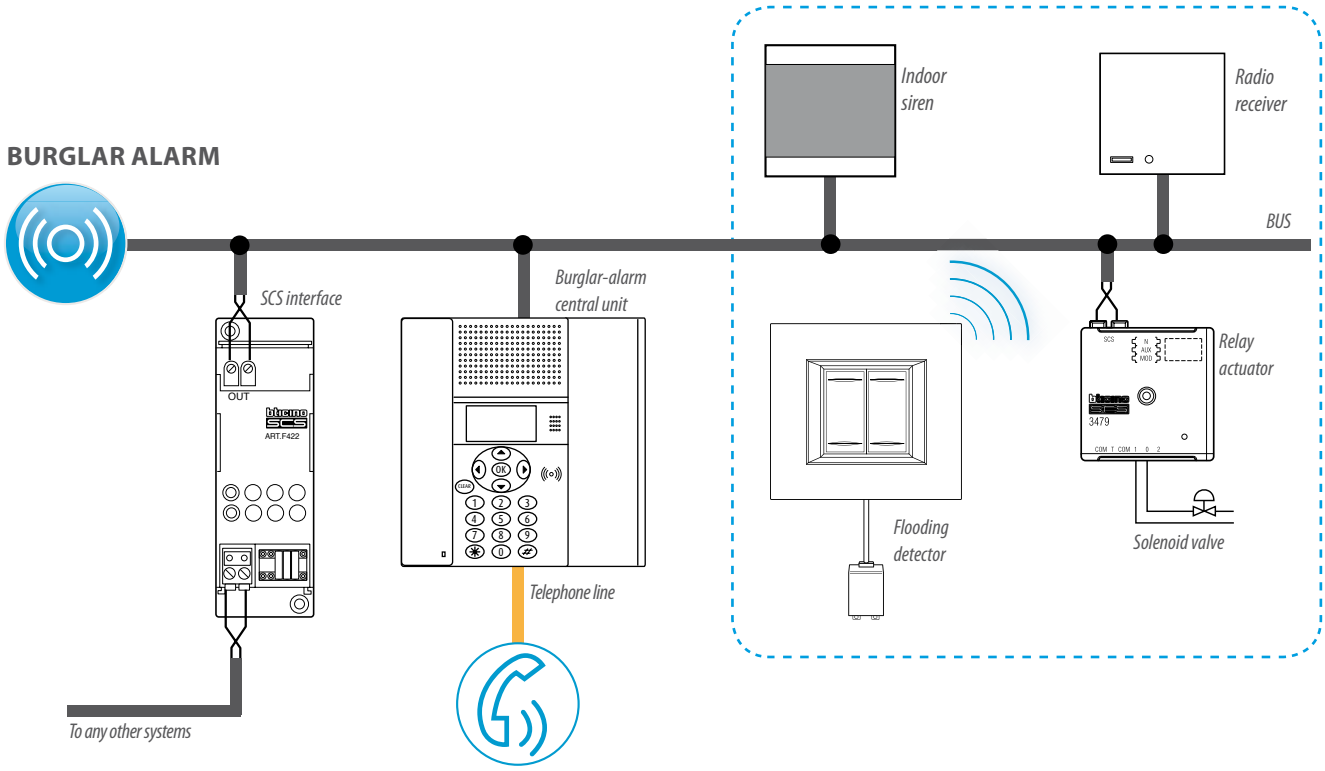
BURGLAR ALARM



Technical alarms: flooding control

A water pipe leak, or a tap left open, may cause serious damage if not immediately detected. With MY HOME, the signal transmitted by the sensor is received by a radio receiver connected to the burglar-alarm system, which can activate an actuator that controls a solenoid valve. In addition, it will also activate an indoor siren and the telephone communicator of the burglar-alarm unit, which sends the assistance request to the MY HOME portal, which will in turn warn the owner, or any nominated individual, by means of:

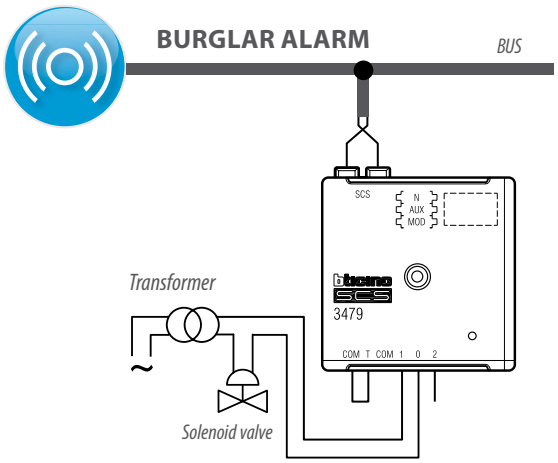
- one or more telephone calls;
- one or more sms messages;
- one or more e-mails.

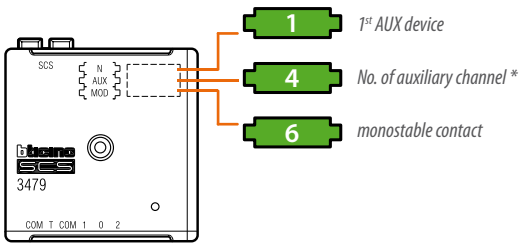


CONNECTIONS AND CONFIGURATIONS

Relay actuator 3479

NOTE: the number 4 of the auxiliary channel is the one shown in the AUX socket of the HC/HS/L/N/NT4618 radio receiver. Configuration for manual reset solenoid valve. When using a different solenoid valve connect configurator no. 3 to the MOD socket (bistable mode).*





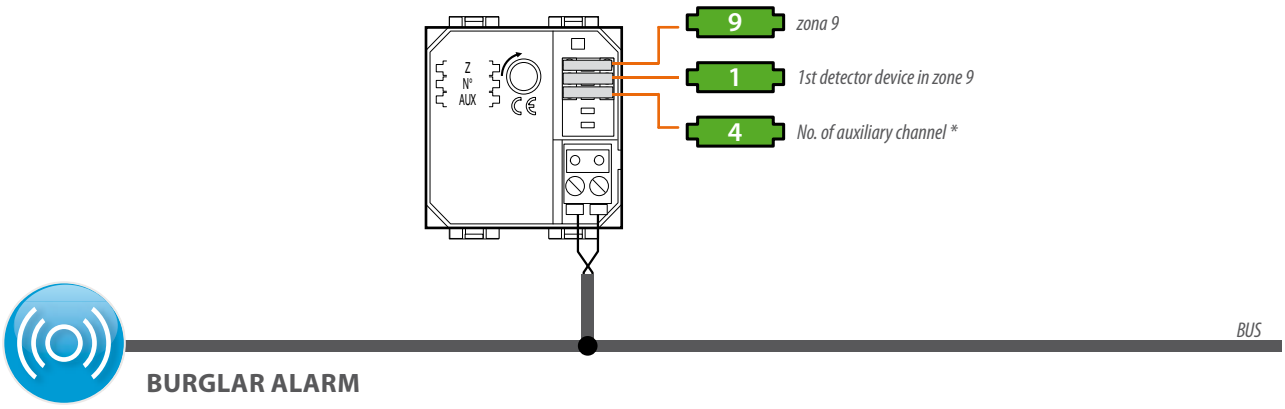
Technical alarms: flooding control

CONNECTIONS AND CONFIGURATIONS

Radio receiver HC/HD/HS/L/N/NT4618

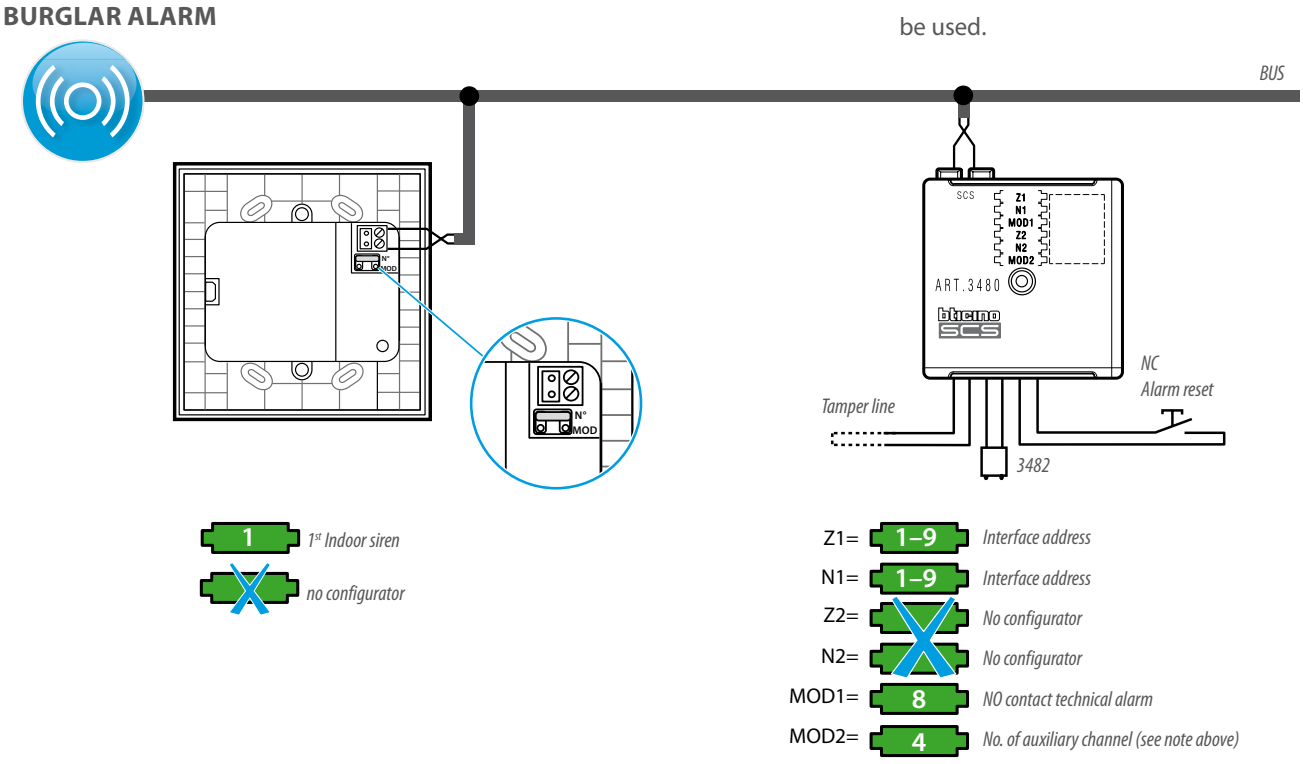
NOTE: The number of the auxiliary channel must also be indicated during the programming of the burglar-alarm central unit, for coupling to the signalling message of the telephone communicator, as well as in the configuration of the relay actuator that controls the electrovalve.*

The coupling between the flood detector and the radio receiver must be completed before installing the detector itself. To save the detection device see the "Configuration" section.



Indoor siren HC/HD/HS/4070-N/NT4070

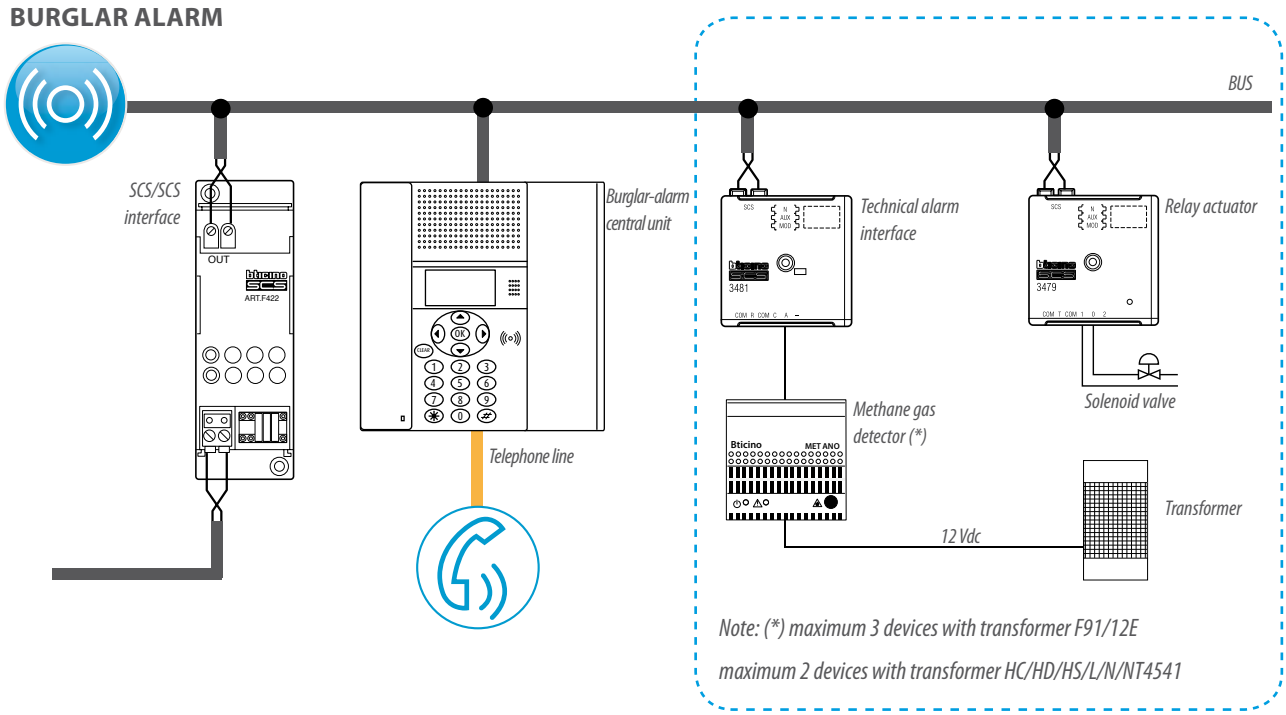
In alternative to the radio flood detector, contact interface 3480, together with sensor 3482, can also be used.



Technical alarms: gas leak alarm with burglar-alarm system

The application shows the use of the methane gas detector combined in the burglar-alarm system by means of an auxiliary channel interface. When the detector detects gas, by means of the interface it generates a "technical alarm" signal managed by the burglar-alarm system to close the solenoid valve and at the same time, makes a telephone call via the central unit/dialling device to the My Home Portal which warns the owner or people indicated by him, by means of:

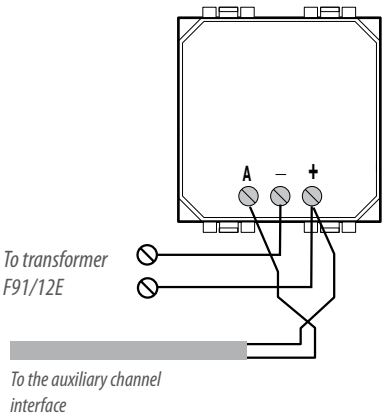
- One or more telephone calls;
- One or more sms;
- One or more e-mail.



CONNECTIONS AND CONFIGURATIONS

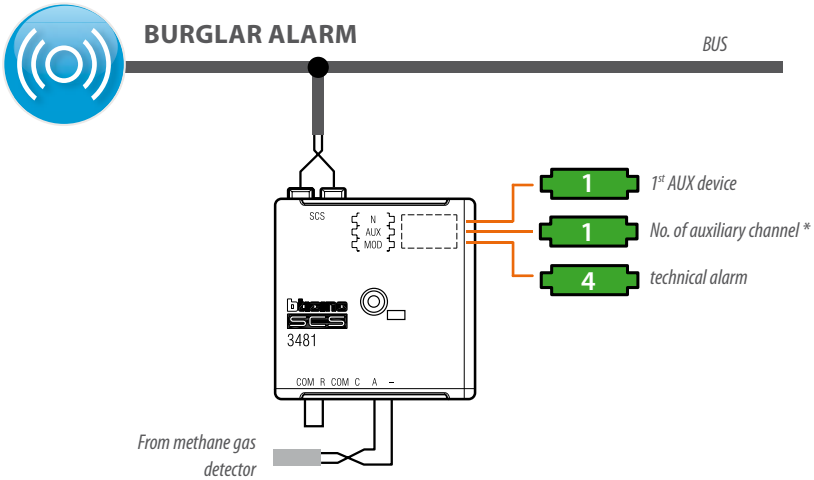
Gas detector HC/HD/HS/L/N/NT4511/12

Note: No configuration



Technical alarm interface 3481

Note: auxiliary channel number 1 must also be indicated while programming the burglar-alarm central unit to link it to the telephone communicator signalling message.*



Technical alarms: gas leak alarm with burglar-alarm system

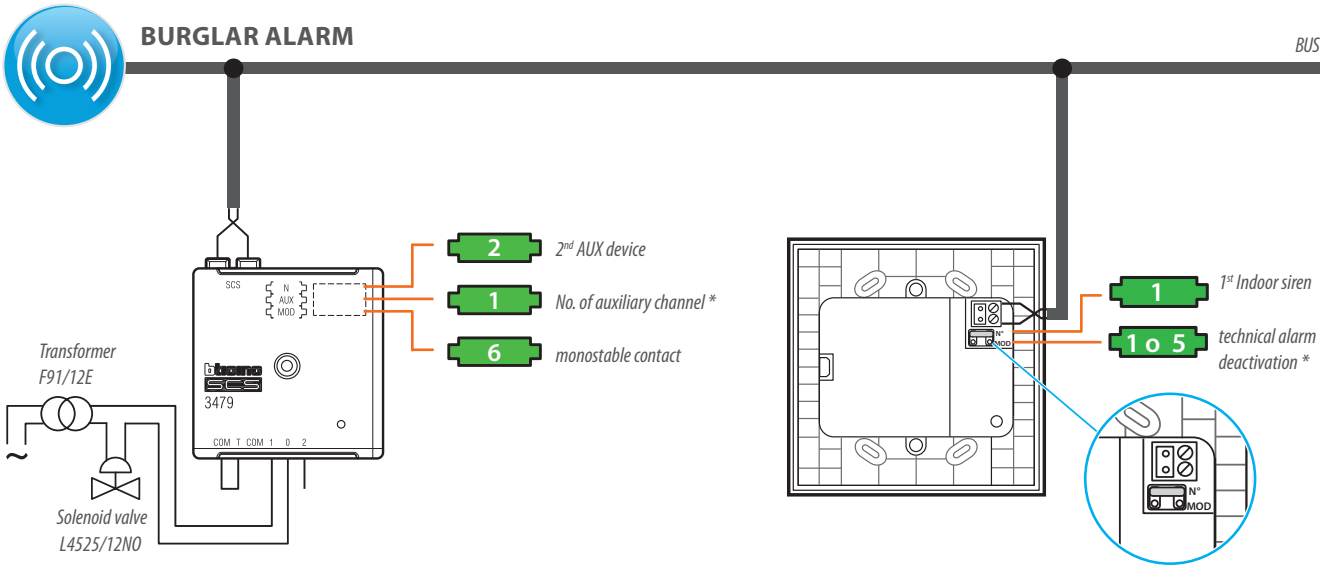
CONNECTIONS AND CONFIGURATIONS

Relay actuator 3479

Note: the auxiliary channel number 1 is that given in the AUX housing of the technical alarm interface 3481.*

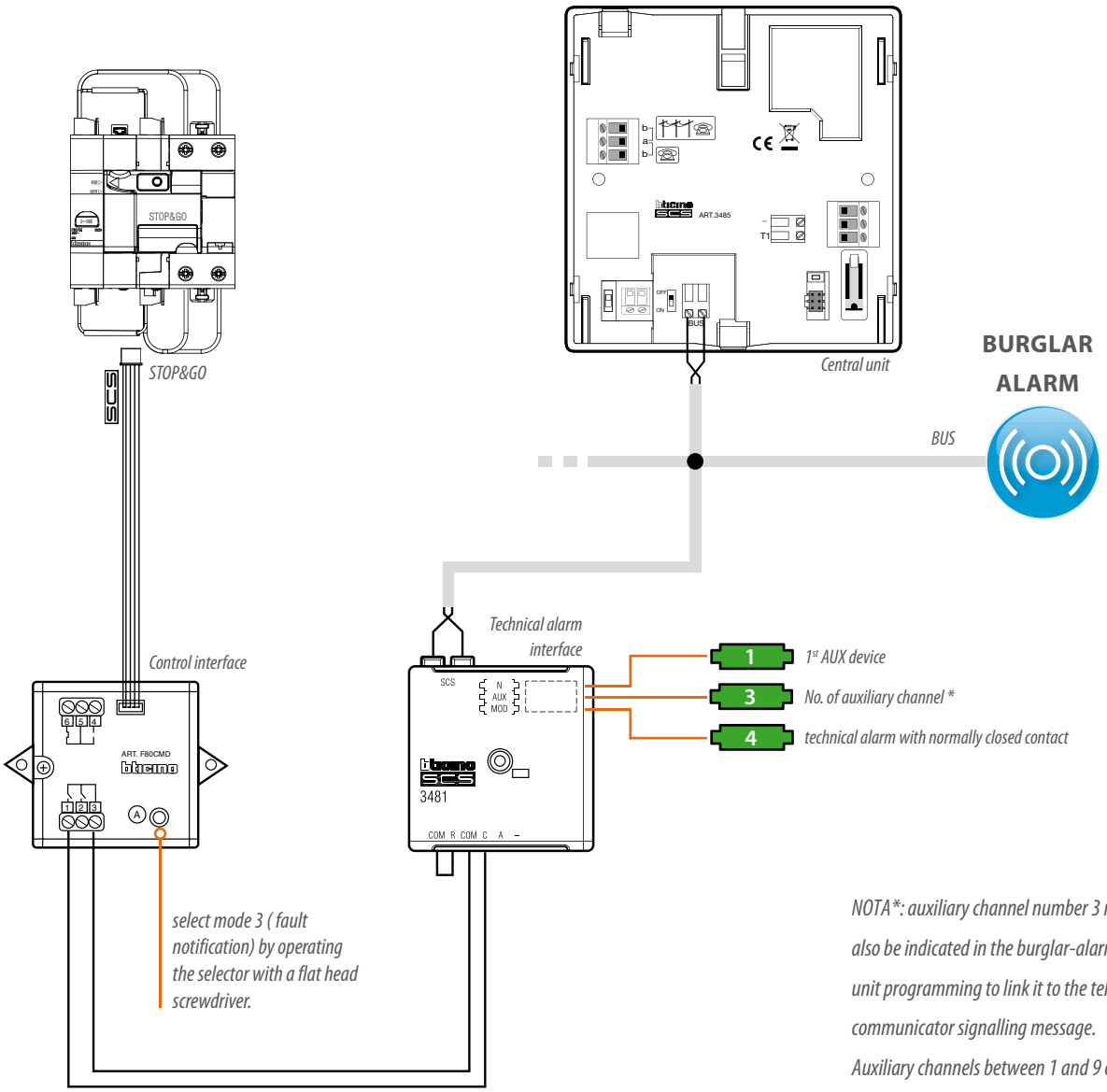
Indoor siren HC/HD/HS/4070-N/NT4070 (optional)

Note: The audible signal of the indoor siren does not activate for technical alarms. This function is performed by the natural gas detector.*



Technical alarms: telephone signalling of the tripping of the general circuit breaker

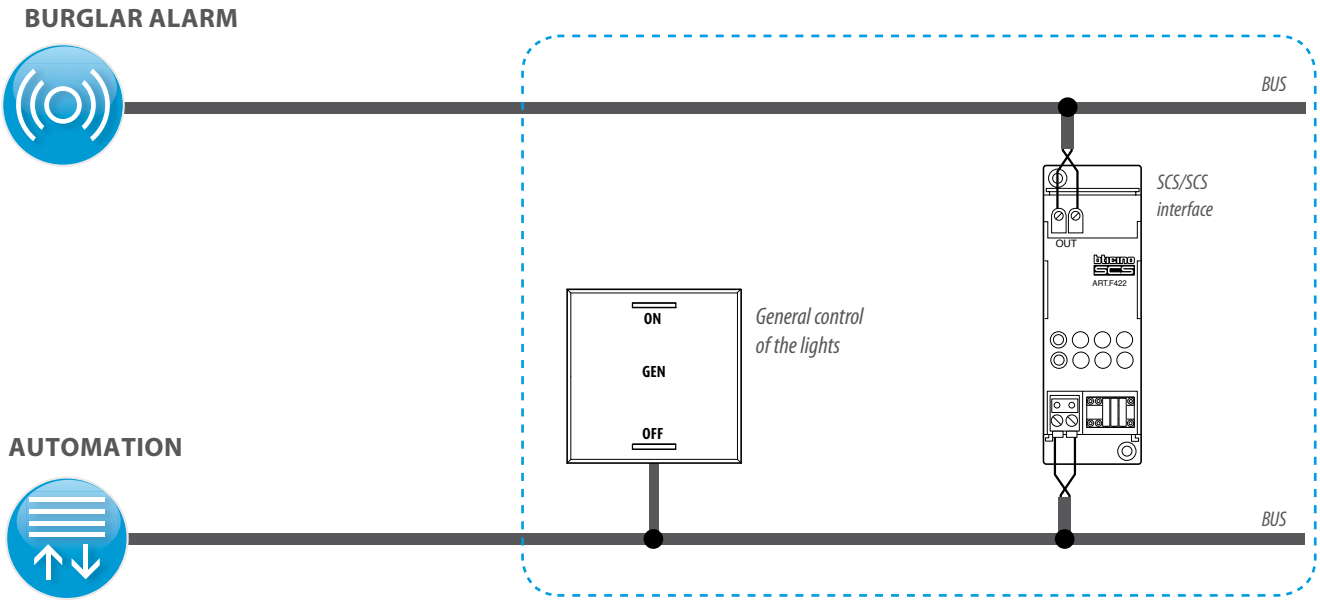
With home switchboards fitted with a SALVAVITA STOP&GO circuit breaker, it is possible to be notified when the main circuit breaker trips, due to lightning, electric disturbance or system fault.
The main condition for this useful function, is that the SALVAVITA STOP&GO device is connected to the burglar-alarm system through an interface, for the detection of the status of the earth leakage circuit breaker. As soon as one of the above problems occur, the SALAVAVITA STOP&GO device automatically closes the tripped circuit breaker and reinstates power supply in full safety. If however the fault remains, due to an insulation defect, or line overload, the burglar-alarm system will send an SMS telephone message or a pre-recorded message, to notify the user of the problem. The telephone message can also be forwarded to the MY HOME WEB portal, which will then send an alarm message by SMS and/or e-mail.
This function is only valid with 3485 and 3486 central units fitted with telephone communicator.



NOTA: auxiliary channel number 3 must also be indicated in the burglar-alarm central unit programming to link it to the telephone communicator signalling message.*
Auxiliary channels between 1 and 9 can be selected.

Advanced applications: switching on the lights because of an alarm

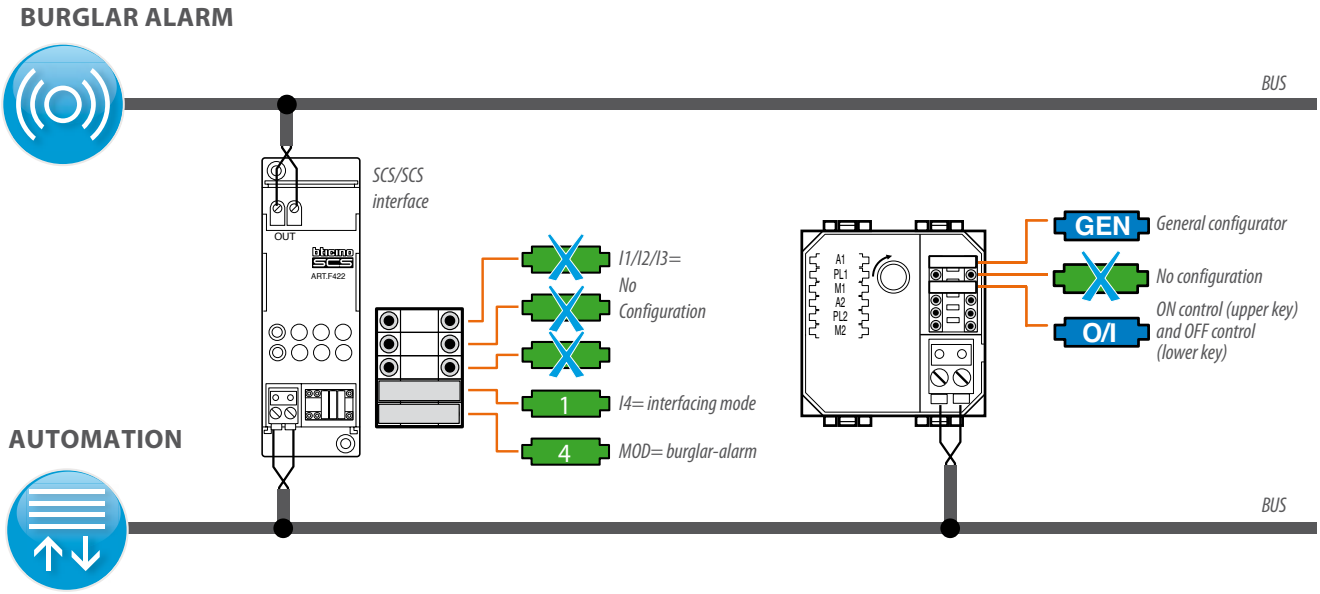
An interesting application is the possibility of automatically switching on all the lights, or a group of them, inside the home, for a preset time following an intrusion. This adds an element of confusion to the sound signal emitted by the siren and the risk of immediate identification will induce the thief to leave. This function is obtained by connecting the automation device and burglar-alarm systems with an interface which allows the burglar-alarm central unit and the automation device devices to dialogue. Obviously the lights can also be switched on and off by means of the local control device in the automation system.



CONNECTIONS AND CONFIGURATIONS

SCS/SCS interface F422

General control of the lights H/L4652/2

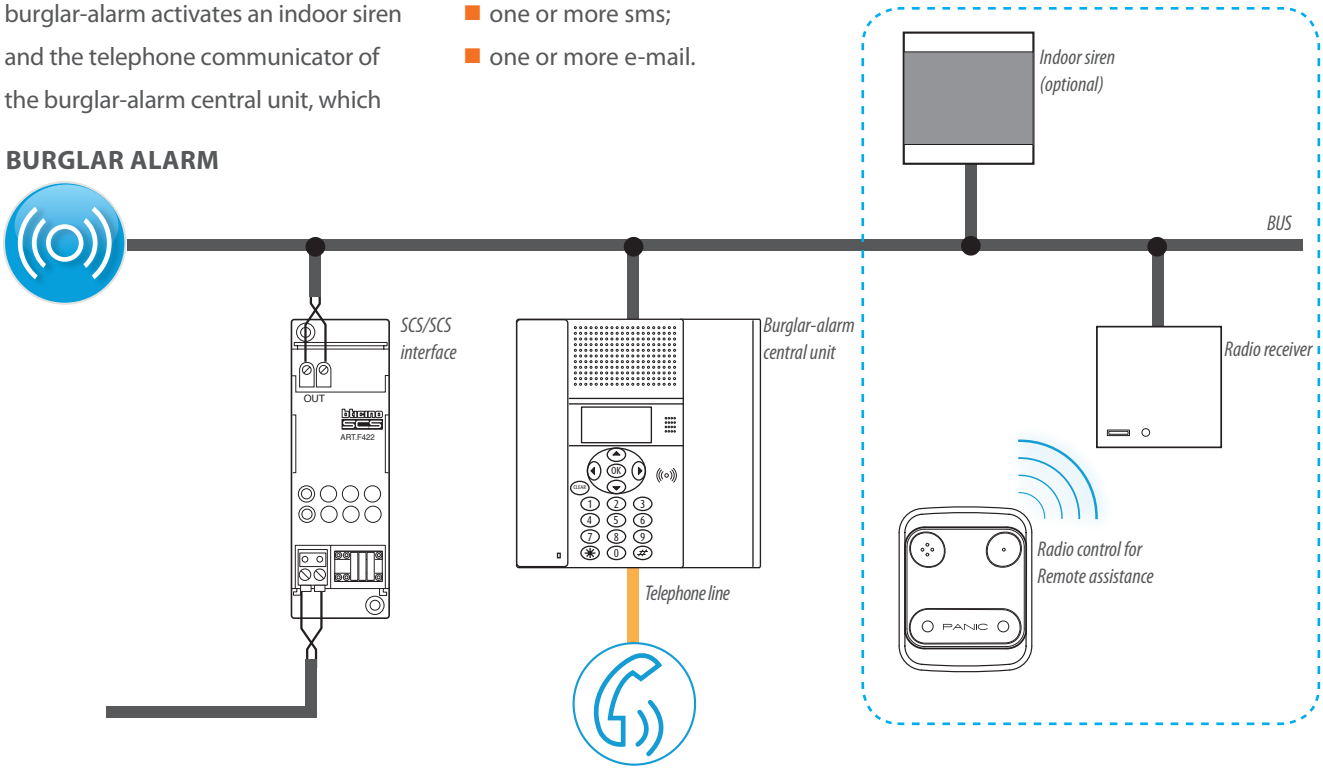


Advanced applications: remote assistance request with telephone call

Old or disabled people can send an assistance request, using a portable remote control. The signal sent is captured by a radio receiver connected to the burglar-alarm. The burglar-alarm activates an indoor siren and the telephone communicator of the burglar-alarm central unit, which sends the assistance request to the MY HOME portal, which will then warn the owner or any nominated individuals, by means of:

- one or more telephone calls;
- one or more sms;
- one or more e-mail.

This function can be activated with the burglar-alarm armed or disarmed, with any type of division.



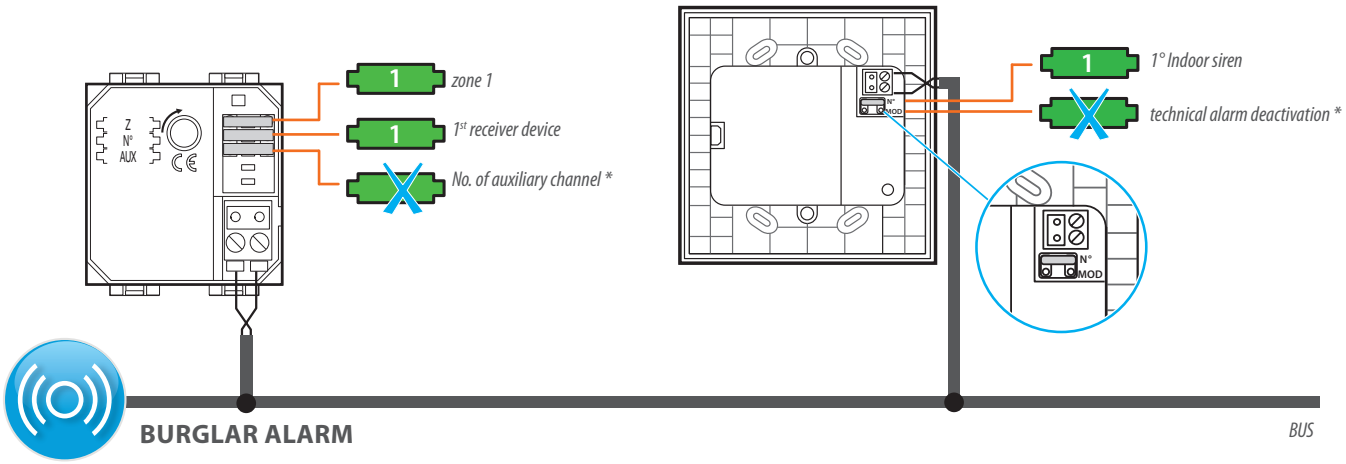
CONNECTIONS AND CONFIGURATIONS

Radio receiver HC/HD/HS/L/N/NT4618

NOTE: If the configurator is not present, auxiliary channel no. 9 is allocated automatically. This auxiliary channel number must be indicated also at the programming stage on the burglar-alarm central unit, for coupling with the signalling message of the telephone communicator.*

Indoor siren HC/HD/HS/4070-N/NT4070 (optional)

NOTA: The audible signalling of the indoor siren does not activate for technical alarms. This function is performed by the natural gas detector.*



Start-up

Note: this operation must be carried out after configuring the system.

In order to startup the system, all devices must be connected and installed properly into their supports.

CENTRAL UNIT 3486

When the central unit is switched on for the first time, the Maintenance menu is shown; the slide switch on the back is in **OFF** position.

To activate the central unit and make it operational proceed as follows:

- choose the language;
- use the central unit to start the tutorial;
- move the slide switch to **ON**;
- press CLEAR twice to exit the maintenance menu;
- select Communication - GSM Management menu and enter the PIN code;
- go to the main screen by holding down CLEAR, switch off the central unit;
- disconnect the battery;
- insert the SIM card;
- connect the battery again and switch the central unit back on again; wait for the battery to fully charge (icon ▭ OFF);
- make sure there is a line connection;
- wait about one minute; during this time, the PIN ERROR or ⊘ icons might be displayed.

After one minute, both icons should disappear; if they do not disappear, check the PIN code or check if the SIM card is disabled by inserting it in a mobile phone.

- go back to the maintenance menu;
- check the reception level of the GSM signal;
- program any scenarios as needed;
- Program an IR remote control, a transponder key, or a Numeric code as shown in the following pages;
- enter time and date;
- edit the names of the zones and devices and the division scenarios.

WARNING: If the central unit battery is exhausted, the GSM module does not operate.

CENTRAL UNIT L/N/NT4600/4

Remove the support from the box (if already installed) and move the changeover switch (1) at the back of the device to the OFF position (maintenance).

Power the system and check that the central unit is in maintenance mode. This is confirmed by the "AUX" (2) and "24h" (3) red LEDs flashing in succession.

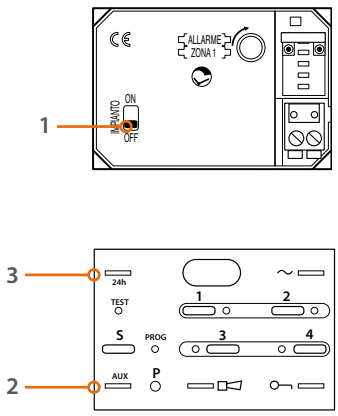
CENTRAL UNIT 3485/B AND HC/HD/HS/L/N/NT4601

When the central unit is switched on for the first time, the Maintenance menu is shown; the slide switch on the back is in **OFF** position.

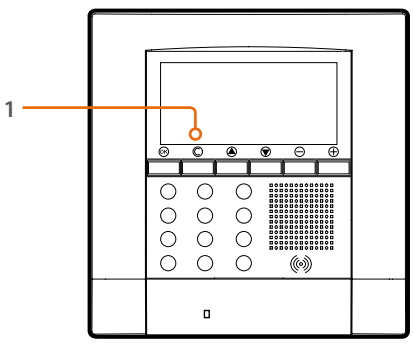
To activate the central unit and make it operational:

- choose the language;
- use the central unit to start the system tutorial;
- move the slide switch to **ON**;
- press © twice to exit the maintenance menu (1)
- return to the maintenance menu;
- program a transponder key or a numeric code;
- enter time and date;
- customize zone, device and division scenario names.

4-zone central unit



Central unit 3485 / 3485B



WARNING: with the system in "Maintenance" mode, the batteries of the system are not charged. If the system remains in this mode for an extended amount of time, the batteries may be damaged.

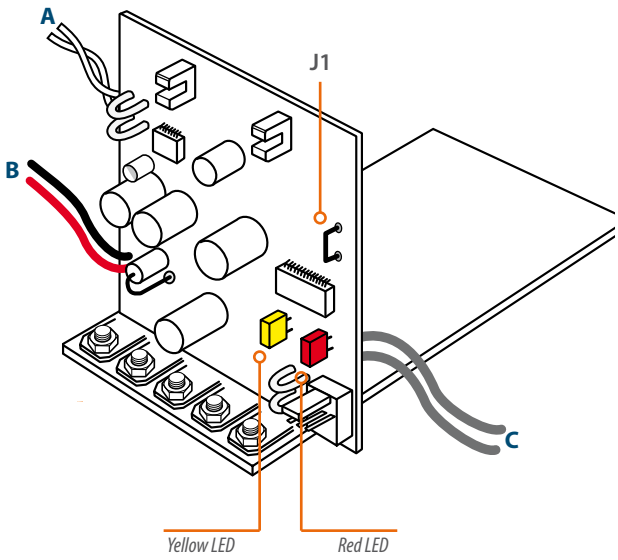
COMMON OPERATIONS FOR ALL CENTRAL UNITS

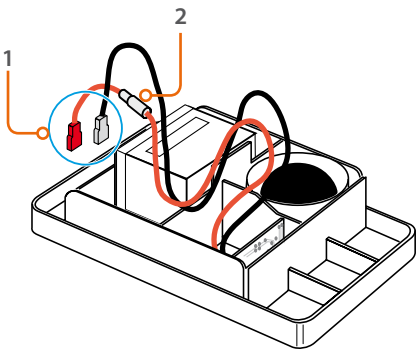
Check if the red LED is on the siren control card.
If it is lit, reverse the connection of the Bus pair.
WARNING: Furthermore, make sure the yellow LED is off; when it is lit, it indicates the alarm condition, hence an abnormal condition in the system. in this case, eliminate the anomaly.
Now connect the two faston terminals (1) to the battery paying attention to the polarity (red +, black -).
WARNING: when there is a connection with an inversion of polarity, the card will be protected with 4A fuses placed inside the cable (2). Install the two siren protection covers.

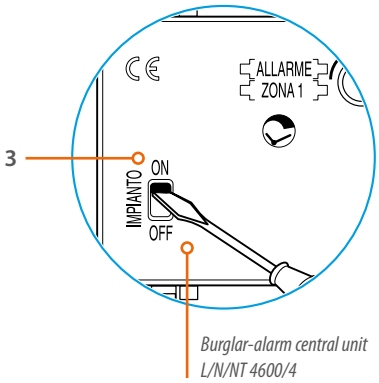
NOTE: in case a second siren is installed, make sure to repeat the LED check after its installation. The J1 jumper of the second siren must be cut (see the siren technical sheet).

If central unit L/N/NT4600/4 is installed, move the changeover switch (3) at the back of the unit to the "ON" position (active).
Fit the central unit inside the box correctly.

INDOOR SIREN CARD







Burglar-alarm central unit L/N/NT 4600/4

A = BUS

B = BATTERY (RED+, BLACK -)

C = SOUND SIGNALLER

Programming of 4050 infrared remote controls

CENTRAL UNIT 3486, 3485/B HC/HD/HS/L/N/NT4601

Programming remote controls is facilitated by the information given by the display (see the installation manual of the central unit supplied with the device).

FLUSH MOUNTED CENTRAL UNITS L/N/NT4600/4

After putting the batteries into the remote controls, with the central unit in maintenance mode (switch on the back in OFF position), press the "P" pushbutton (1) using a pencil or similar object.

Make sure that the yellow LED "PROG" (2) is lit and that a short tone is emitted.

Place the remote control transmission lens (3) against the central unit receiving lens (4) in order to keep it perfectly aligned (cover the lens in case of interferences with the infrared, e.g. due to the direct light of lamps or spotlights).

Press the transmission pushbutton (5) and hold it down until the tone is emitted.

A tone lasting about half a second means that the programming process has been executed correctly.

NOTE: A tone lasting about 4 seconds means that the programming process has not been executed correctly. hence it will be necessary to repeat the operation.

When the remote control programming has been completed, repeat the operation for all supplied remote controls (maximum 30).

NOTE: in this stage, it is possible to program remote controls for other systems.

After programming the last remote control, press the "S" pushbutton (6). Make sure the yellow LED "PROG" (7) is off.

PAIRING OF RADIO REMOTE CONTROLS 348220

1. Switch the system to "maintenance" mode.

2. Press the Radio receiver HC/HD/HS/L/N/NT4618 programming pushbutton for five seconds, until the red LED comes on.

3. Press the connection pushbutton for 5 seconds.

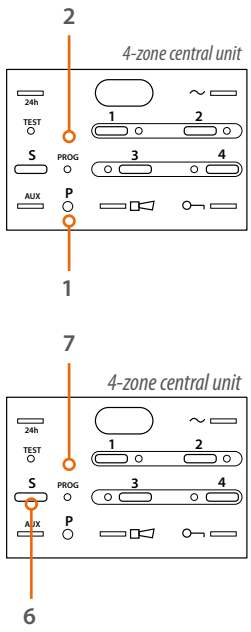
4. If the pairing of the device has been performed correctly, the red LED of the radio receiver will go off.If this does not happen, repeat the procedure from step 3. If the LED flashes, it means that the device memory is full.

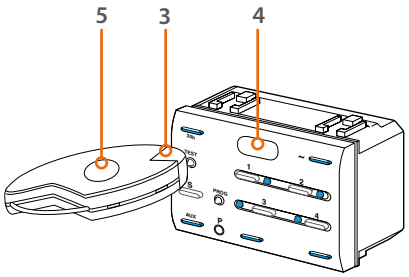
5. To save other devices in the radio receiver repeat step 2.

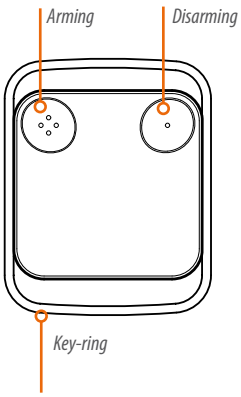
6. Perform self learning of the system from the central unit.

7. Program the remote controls on the central unit, if this is of a type "with display".

8. Exit "maintenance" mode.







Programming of 3530S and 3540 transponders

CENTRAL UNIT 3486, 3485/B HC/HD/HS/L/N/NT4601

programming transponders is facilitated by the information given by the display (see Central unit installer manual).

FLUSH MOUNTED CENTRAL UNITS L/N/NT4600/4

The transponder (badge) programming operation is necessary in order for it to work as a normal infrared remote control 4050. Please keep in mind that when the transponder-reader is used as a activator, it will almost always be installed in places different from the one in which the central unit is located. Therefore, it is recommended to temporarily connect it near the central unit.

The initial programming - which is carried out when installing the Transponder reader – shall be carried out with the central unit in MAINTENANCE mode (selector switch located on the back in OFF position)

Procedure:

1. With central unit in maintenance mode, press the P key and check if the yellow LED PROG lights up.

2. Re-program the IR remote controls first (see chapter REMOTE CONTROL PROGRAMMING).

3. Now, move the badges towards the transponder reader (figure at bottom left).

4. Make sure that two short tones are emitted: the first is emitted from the transponder reader, the second is emitted from the central unit.

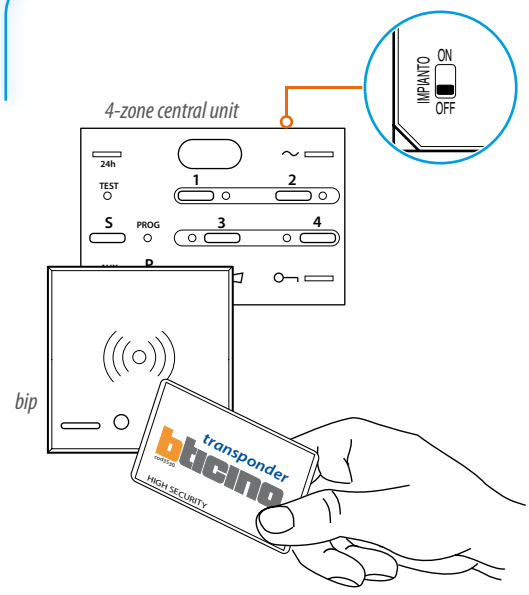
5. Repeat points 3 and 4 for all available badges.

6. When you have finished programming the last badge, press the S pushbutton on the central unit (the yellow PROG LED turns off) and move the back selector switch to ON - dwg.A.

DELETING OR ADDING A TRANSPONDER

When using central units 3486, 3485/B and HC/HD/HS/L/N/NT4601 the deletion of transponders is facilitated by the information given by the display (see Central unit installer manual).

In systems with FLUSH mounted central units L/N/NT4600/4, a new programming process is required to delete previously stored transponders or to add new ones. Follow the procedure described in section "REMOTE CONTROL PROGRAMMING" (of course, during this procedure, the badge will have to be moved near the transponder reader instead of the central unit). This procedure will delete all stored transponders (partial deletion is not possible).



LUMINOUS AND AUDIBLE INDICATORS	BUZZER	LED
SYSTEM ENABLED	0.5 sec	OFF
SYSTEM DISABLED	0.5 sec	Fixed green
INCORRECT ACTIVATION	4 sec	Flashing green
ALARM OCCURRED	-	Fixed red
DEACTIVATION AFTER ALARM OCCURRED (allows you to check the zone in which the alarm occurred)	0.5 sec	Fixed orange

IMPORTANT: the central unit can save up to 30 system arming/disarming devices. If a transponder is used as a remote control, only 29 devices can be saved. This is because an IR remote control (4050) must always be present.

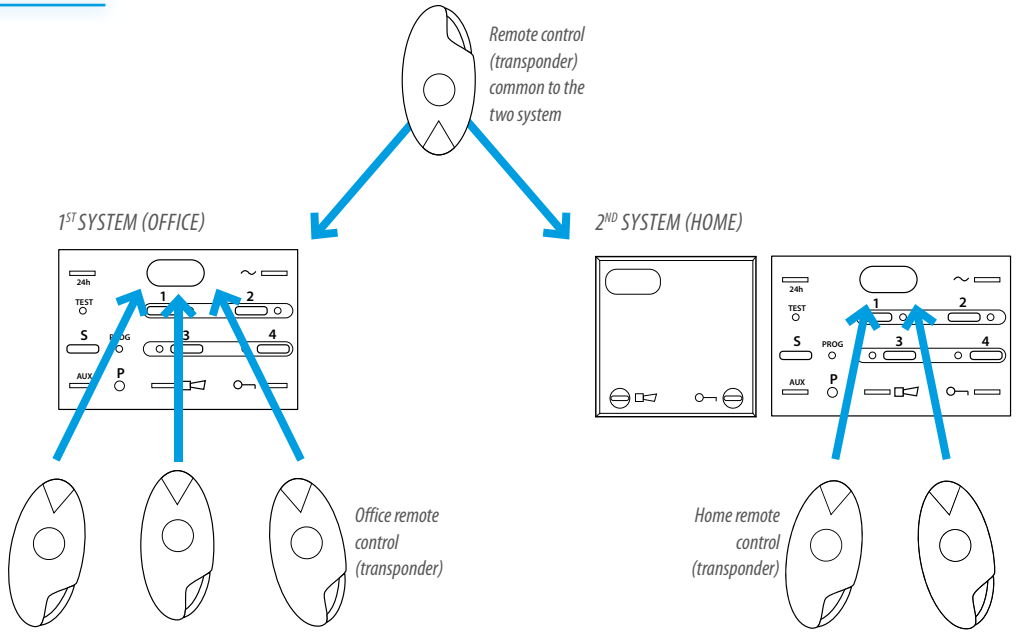
Programming a remote control or a transponder for several systems

CENTRAL UNIT 3486, 3485/B AND HC/HD/HS/L/N/NT4601

Programming is facilitated by the information given by the display (see Central unit installer manual).

FLUSH MOUNTED CENTRAL UNITS L/N/NT4600/4

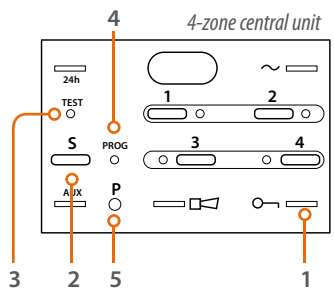
If you have two or more burglar-alarm systems with a flush mounted central unit (for example, home and office), it will be possible to program one or more remote controls able to interact with all systems


Remote control (transponder) common to the two system
1ST SYSTEM (OFFICE)
2ND SYSTEM (HOME)
Office remote control (transponder)
Home remote control (transponder)

Note: carry out these operations with the two systems already activated: both central units with rear selector switch in ON position.

Press the "S" pushbutton on the central unit of the second system (2) and hold it down. Send an impulse using a previously-enabled remote control (keep it at a maximum distance of 50 cm from the central unit).
Make sure the yellow LED "TEST" (3) is on. Send a second impulse. Make sure the yellow LED "PROG" (4) is on.
Release the "S" pushbutton (2).
Press the "P" pushbutton (5) by using a pencil or a similar object.
Make sure a short tone is emitted.

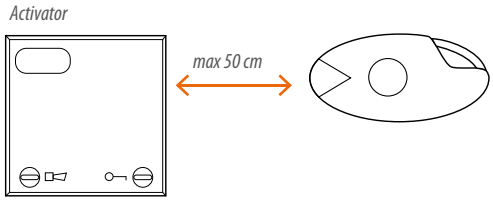
Warning: When programming a newly-purchased remote control, first of all do the programming described in chapter "REMOTE CONTROL PROGRAMMING" (user manual).
NOTE: make sure the system is disabled - green LED (1) on.

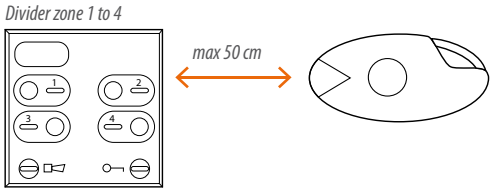


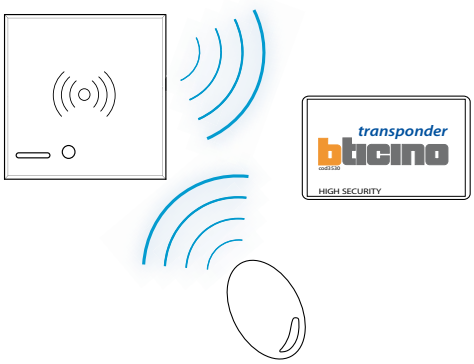
Note: all previously stored codes of the remote controls are now deleted and can no longer be recognised by the central unit. Hence, it will be necessary to re-program all remote controls and transponders which will need to act on this system by following the descriptions in chapter "REMOTE CONTROL PROGRAMMING" (user manual).

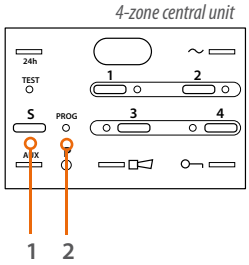
Direct the remote control previously programmed on the first system towards a 1 to 4 zone divider or connector of the second system.
Press the remote control pushbutton as if it were a normal enabling process.
If a transponder is used, move it towards the transponder reader and wait for the beep sound.
From now on, the remote control code for the first system will also be recognised by the second system.
When the remote control programming has been completed, repeat the operation for all remote controls requiring this function (30 altogether).

After completing the programming operations, press the "S" pushbutton (1) and make sure the yellow LED "PROG" (2) is off.





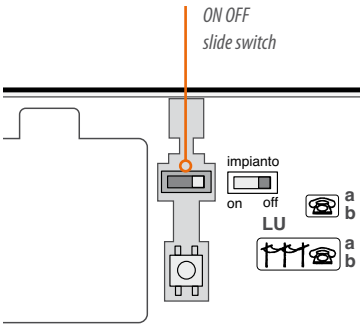




System activation

SYSTEM WITH CENTRAL UNIT 3486, 3485/B – HC/HD/HS/L/N/NT4601

After completing the operation described in the chapter "Putting into operation" of the system, the central unit becomes operational.
Perform a system test as described below.

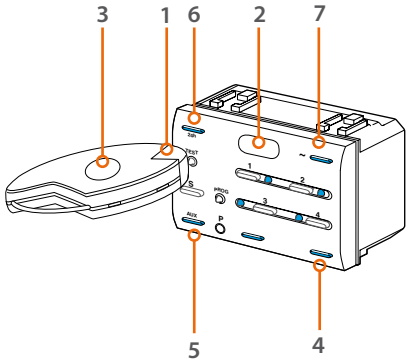


Central unit (3486) rear view

SYSTEM WITH CENTRAL UNIT L/N/NT4600/4

First of all, set the central unit to ON. To activate the system, direct the remote control (1) towards the receiving lens (2) of the central unit at a maximum distance of 50 cm.
Activate the remote control by pressing the pushbutton (3) once or twice with a time interval of 5 seconds between the first and the second time, until the green LED (4) lights up.
Activate the remote control with the pushbutton (3), thus making sure that the green LED (4) turns off.
Activate the remote control again with the pushbutton (3), thus making sure that the green LED (4) turns on.
Make sure that the red LEDs "AUX" (5) and "24h" (6) are off.

NOTE: if the two LEDs continue to flash, it means that the selector switch at the back of the central unit has not been set to ON. If the 24h LED is steadily on, it means that one of the devices is producing a 24h alarm. Check if the installation has been carried out properly (see problems/causes/solutions table).
Make sure the green LED "~" (7) is on.
In this condition, the system is activated and disabled.



Now test the system as indicated in the next pages.

System test

CENTRAL UNIT 3486, 3485/B AND HC/HD/HS/L/N/NT4601

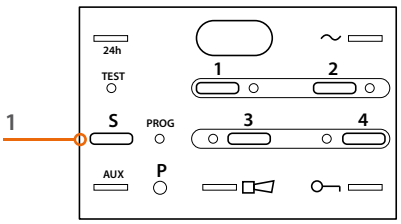
Access the "Maintenance" menu and select "TEST", as described in the installer manual supplied with the central unit.

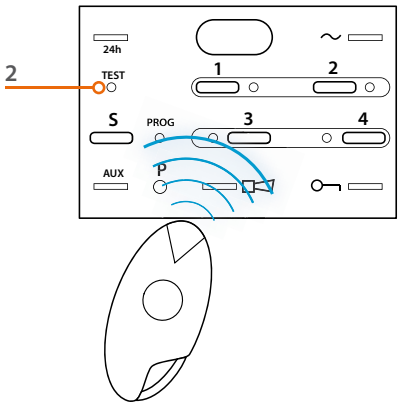
1. When the system is disabled (led on) press **S** and hold it down.

2. Press the pushbutton of one of the enabled remote controls; the **TEST** LED turns on, hence you can now release the **S** key.

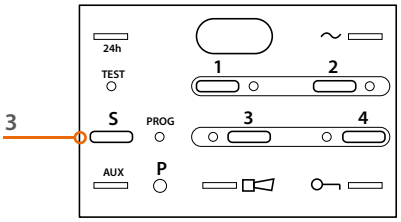
3. After carrying out the verifications described in the following paragraphs ("Test procedure"), press **S** to end the test; Make sure the **TEST** LED turns off.

Central units L/N/NT4600/4





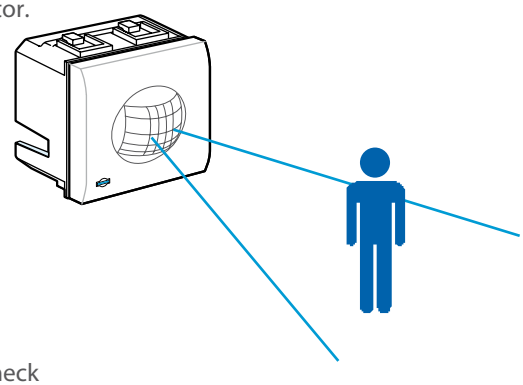
Central units L/N/NT4600/4



TEST PROCEDURE

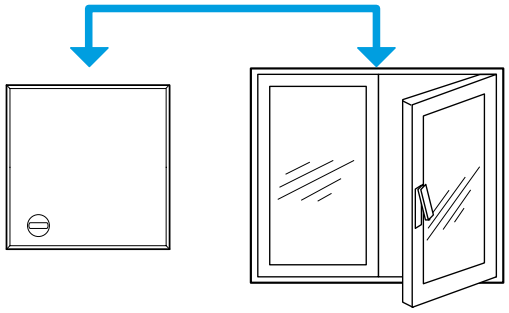
1. Infrared detector check

The red LED should light up when passing through the area protected by the detector.



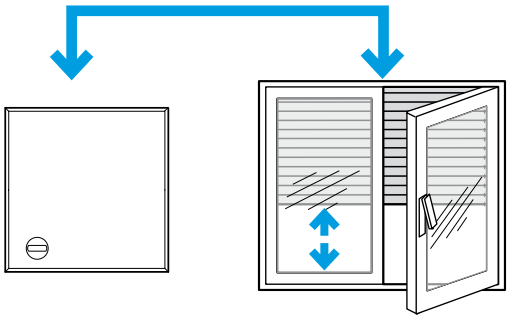
2. Contact check

The red LED of the contact interface should light up when opening the windows or entrance door.



Warning : when testing, the central unit L/N/NT/4600/4 does not recognize the remote controls

When the rolling shutter controlled by the rope sensor is raised or lowered, the red LED of the interface comes on after the number of pulses set, and will go off again after 4 seconds.



System test: two line contact interfaces check

The interfaces 3480 and F482 are equipped with LED indicators for properly start-up the system.
During the startup procedure, the central unit must not be powered. If it is, it must be in test mode.

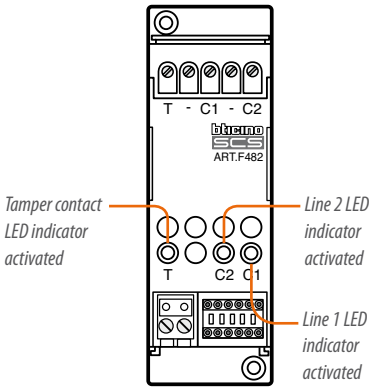
1. Connect the interface to the SCS bus and the wires of the contacts and tamper to their terminals.

2. Insert the required configurators and close again using the transparent shell (interface 3480).

3. Close all contacts, including the Tamper.

4. Power the item.

PROCEDURE FOR F482


T - C1 - C2
ART.F482
T C2 C1
Tamper contact LED indicator activated
Line 2 LED indicator activated
Line 1 LED indicator activated

4.1 If the LEDs start flashing, check the configuration and repeat the startup procedure. If the LEDs flash quickly, only 5/6 times before stopping, go on to the following paragraph.

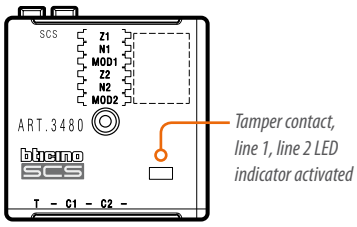
4.2 If the "tamper contact" LED is now off, go on to paragraph 4.3); if it stays on, make sure that the tamper line is short-circuited and then repeat the procedure from paragraph 4).

4.3 If the "line contact 1 / line contact 2" LEDs are now off, go on to paragraph 4.4); if it stays on, make sure that the contacts of the two lines are closed (e.g. windows closed).

4.4 Make sure the LED is on when opening the various contacts:

- when the contact is closed (e.g. window closed), the LED must be off,
- when the contact is open (e.g. window open) the LED must be on.

PROCEDURE FOR 3480



4.1 If the LEDs start flashing, check the configuration and repeat the startup procedure. If the LED flashes quickly, only 5/6 times before stopping, go on to paragraph 4.2).

4.2 If the LED is now off, go on to paragraph 4.3); if it stays on, make sure:

- that the tamper line is short-circuited and then repeat the procedure from paragraph 4)
- the enclosure of the interface is well closed and then repeat the procedure from paragraph 4) after switching the power off.
- the contacts of the two lines are closed (e.g. windows closed) and then repeat the procedure from paragraph 4.2)

4.3 Make sure the LED is on when opening the various contacts:

- when the contact is closed (e.g. window closed), the LED must be off,
- when the contact is open (e.g. window open) the LED must be on.

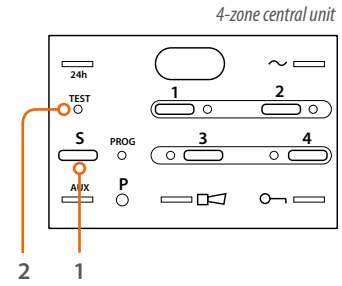
COMPLETION OF THE TEST STAGE

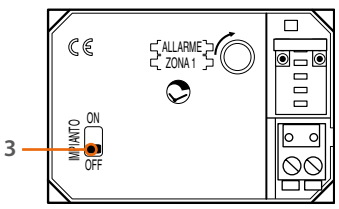
- 3486, 3485/B and HC/HD/HS/L/N/NT4601 central units

Exit the "Maintenance" menu following the procedure described in the installation manual supplied with the central unit.

- L/N/NT4600/4 central units

Once the checks have been completed press pushbutton (1), check that the "TEST" LED (2) has gone off and move the ON-OFF selector (3) to the OFF position. Remove the swivel IR detectors from the box and tighten the screw locking the adjustments.





Configuration or system modifications - Maintenance

If it is necessary to modify the configuration of the system after starting it up, follow the procedure below after disabling the system:

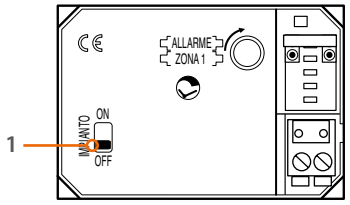
CENTRAL UNITS 3486, 3485/B AND HC/HD/HS/L/N/NT4601

- Go to the "Maintenance" menu following the procedure described in the installation manual supplied with the central unit;
- Disconnect the power supply from the system;
- Replace or add the configurators to the devices;
- Connect the power supply;
- Ensure that the central unit performs the system self-learning procedure;
- Perform the system test.

CENTRAL UNITS L/N/NT4600/4

- after disabling the system, remove the central unit from the box and set the selector (1) to "OFF" within 30 seconds, otherwise a 24h alarm signal will be produced, if the tamper rod has been installed;
- switch off the system;
- replace or add the configurators to the devices;
- switch on the system;
- flip the selector switch (1) to "ON";
- install the central unit in the box;
- activate the system by sending one or two impulses with the remote control.

4-zone central unit



NOTE: for normal operation of the system, please refer to the guidelines specified in the "User manual".

WARNING: If you are going to install a device next to the central unit, do not place the tamper rod in the new device as the system would produce a 24h alarm. The anti-tampering protection is guaranteed by the tamper rod installed on the central unit.

ORDINARY MAINTENANCE OF THE BURGLAR-ALARM SYSTEM

It is recommended that a test is performerd regularly to check that the system i working correctly, that the system back-up batteries are charged, as well as the condition of any radio devices.